Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
                 Web Page for STN Seminar Schedule - N. America
                 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS
        MAR 15
NEWS
        MAR 16
                 CASREACT coverage extended
                 MARPAT now updated daily
NEWS
         MAR 20
NEWS
         MAR 22
                 LWPI reloaded
NEWS 6
        MAR 30
                 RDISCLOSURE reloaded with enhancements
NEWS
         APR 02
                 JICST-EPLUS removed from database clusters and STN
         APR 30
                 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 8
NEWS 9
         APR 30
                 CHEMCATS enhanced with 1.2 million new records
         APR 30
                 CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 10
         APR 30
                 INPADOC replaced by INPADOCDB on STN
NEWS 11
         MAY 01
                 New CAS web site launched
NEWS 12
         MAY 08
                 CA/CAplus Indian patent publication number format defined
NEWS 13
NEWS 14
         MAY 14
                 RDISCLOSURE on STN Easy enhanced with new search and display
                 fields
                 BIOSIS reloaded and enhanced with archival data
NEWS 15
         MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS 16
         MAY 21
         MAY 21
                 CA/CAplus enhanced with additional kind codes for German
NEWS 17
                 patents
NEWS 18
         MAY 22
                 CA/CAplus enhanced with IPC reclassification in Japanese
                 patents
                 CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 19
         JUN 27
NEWS 20
         JUN 29
                 STN Viewer now available
NEWS 21
         JUN 29
                 STN Express, Version 8.2, now available
NEWS 22
         JUL 02
                 LEMBASE coverage updated
NEWS 23 JUL 02
                 LMEDLINE coverage updated
NEWS 24
         JUL 02
                 SCISEARCH enhanced with complete author names
                 CHEMCATS accession numbers revised
NEWS 25
         JUL 02
NEWS 26
         JUL 02
                 CA/CAplus enhanced with utility model patents from China
NEWS 27
         JUL 16
                 CAplus enhanced with French and German abstracts
NEWS 28
         JUL 18
                 CA/CAplus patent coverage enhanced
              29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
NEWS EXPRESS
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
              For general information regarding STN implementation of IPC 8
NEWS IPC8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 11:15:22 ON 18 JUL 2007

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:15:40 ON 18 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JUL 2007 HIGHEST RN 942577-08-4 DICTIONARY FILE UPDATES: 17 JUL 2007 HIGHEST RN 942577-08-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

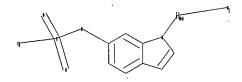
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

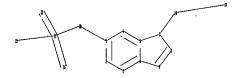
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10566101a.str





```
chain nodes :
10 11 12 14 15 16 17
ring nodes :
1 \ \bar{2} \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9
chain bonds :
3-10 7-14 10-11 11-12 11-15 11-16 14-17
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9
exact/norm bonds :
3-10 5-7 7-8 7-14 10-11 11-12 11-15 11-16 14-17
exact bonds :
6-9 8-9
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :
```

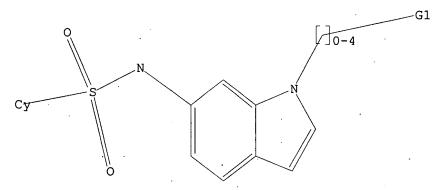
G1:Cy,N

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 12:CLASS 14:CLASS 15:Atom 16:CLASS 17:CLASS

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 Cy,N

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 11:15:58 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 229 TO ITERATE

100.0% PROCESSED 229 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3673 TO 548

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 11:16:02 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4067 TO ITERATE

100.0% PROCESSED 4067 ITERATIONS 20 ANSWERS

SEARCH TIME: 00.00.01

L3 20 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

FULL ESTIMATED COST ENTRY SESSION 172.10 172.31

FILE 'CAPLUS' ENTERED AT 11:16:07 ON 18 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Jul 2007 VOL 147 ISS 4 FILE LAST UPDATED: 17 Jul 2007 (20070717/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 13 full

L48 L3

=> d ibib abs hitstr tot

ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

2007:410811 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 146:421837

Preparation of fused pyrrole derivatives as GR TITLE:

modulators

Sone, Toshihiko; Sawaki, Rieko; Nakajima, Tomoko INVENTOR(S):

Dainippon Sumitomo Pharma Co., Ltd., Japan PATENT ASSIGNEE(S):

PCT Int. Appl., 403pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	rent	NO.	•	KIND DATE					APPL	ICAT		DATE					
WO 2007040166				A1 20070			0412	. ,	WO 2	006-		20060929					
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
							DE,										
							HU,										
		-					LR,										
		MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
							SK,										
		UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW₁	GH,
,		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	$\mathbf{M}\mathbf{T}$										
RITY APPLN. INFO.:										JP 2	005-	2865	76		A 20050930		
D. GOUDGE (G)						- M - M	110.	1210	27								

PRIOR OTHER SOURCE(S): MARPAT 146:421837

GΙ

AΒ Title compds. I [R1 = H, (un) substituted alkyl, (un) substituted alkenyl, etc.; R2 = H, halo, carboxyl, etc.; -W4:W5-W6:W7- = -CR4:CR5-CR6:CR7-, -N:CR5-CR6:CR7-, -CR4:N-CR6:CR7-, etc.; R4-R7 = -E-A; E = single bond, -O-, -CO-, etc.; when E is a single bond, A is H, halo, cyano, etc.; when E is -O-, -CO-, etc., A is H, (un) substituted alkyl, (un) substituted cycloalkyl, etc.; R8 = -OR11, -SR11, -N(R11)R12; R11, R12 = H, (un) substituted alkyl; R9 = alkyl substituted with halo, cycloalkyl substituted with halo; R10 = -[C(R13)R14]n-R15; R13, R14 = H, alkyl, halo; R13 and R14 may combine to form a oxo group; or R13 and R14, together with the carbon atom to which they are attached, form a cycloalkane (one or two -CH2- in cycloalkane may be replaced with -NH-, -S-, -S(:0)-, etc.); n = 0-10; R15 = hydroxy, (un)substituted alkyl, (un)substituted alkenyl, etc.], prodrugs or pharmaceutically acceptable salts were prepared For example, reaction of 1-(1-benzyl-6-nitro-1H-indol-3-yl)-2,2,2trifluoroethanone, e.g., prepared from 6-nitroindole in 2 steps, with trimethylphosphonium iodide followed by treatment with piperidine afforded compound II. In glucocorticoid receptor (GR) binding assays, compound II exhibited the inhibitory activity of 92% at 100 nM. Compds. I are claimed useful for the treatment of inflammation and diabetes. IT

934224-55-2P

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fused pyrrole derivs. as GR modulators for treatment of inflammation and diabetes)

RN 934224-55-2 CAPLUS

1H-Indole-3-acetic acid, α -hydroxy-6-[[(4methylphenyl)sulfonyl]amino]-1-(phenylmethyl)- α -(trifluoromethyl)-, ethyl ester (CA INDEX NAME)

REFERENCE COUNT:

51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:470334 CAPLUS

DOCUMENT NUMBER:

143:125834

TITLE:

AUTHOR(S):

A Three-Dimensional Pharmacophore Model for

5-Hydroxytryptamine6 (5-HT6) Receptor Antagonists Lopez-Rodriguez, Maria L.; Benhamu, Bellinda; de la

Fuente, Tania; Sanz, Arantxa; Pardo, Leonardo;

Campillo, Mercedes

CORPORATE SOURCE:

Departamento de Quimica Organica I, Facultad de Ciencias Quimicas, Universidad Complutense, Madrid,

E-28040, Spain

SOURCE:

Journal of Medicinal Chemistry (2005), 48(13),

4216-4219

CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

PUBLISHER:
DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Forty-five structurally diverse 5-hydroxytryptamine6 receptor (5-HT6R) antagonists were selected to develop a 3D pharmacophore model with the Catalyst software. The structural features for antagonism at this receptor are a pos. ionizable atom interacting with Asp3.32, a hydrogen bond acceptor group interacting with Ser5.43 and Asn6.55, a hydrophobic site interacting with residues in a hydrophobic pocket between transmembranes 3, 4, and 5, and an aromatic-ring hydrophobic site interacting with Phe6.52.

IT 753020-94-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(three-dimensional pharmacophore model for 5-HT6 receptor antagonists)

RN 753020-94-9 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & C1 \\
N & S & NH \\
O & N & CH_2 - CH_2 - N
\end{array}$$

REFERENCE COUNT:

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:136598 CAPLUS

DOCUMENT NUMBER:

142:240323

TITLE:

Active substance combination comprising a compound with NPY receptor affinity and a compound with 5-HT6

receptor affinity

INVENTOR(S): Torrens Jover, Antoni; Ma

Torrens Jover, Antoni; Mas Prio, Josep; Dordal Zueras, Alberto; Codony Soler, Xavier; Merce Vidal, Ramon;
Aurelio Castrillo Perez, Jose; Frigola Constansa

Aurelio Castrillo Perez, Jose; Frigola Constansa,

Jordi; Buschmann, Helmut-Heinrich
PATENT ASSIGNEE(S): Laboratorios del Esteve S. A., Spain

SOURCE: PCT Int. Appl., 427 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPLICATION NO. DA							
WO	2005	0140	4 5		A1 20050217				. 1						2	0040	729
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ΕE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
							LV,										
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
							TZ,										
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
							RU,										
							GR,						-	-			-
							CF,										
			TD,										'			•	•
ES	2228	268			A1	A1 20050401 ES 2003-1815 2003073										730	
ES	2228	268			B1 20060701												
AU	2004	2624	88		A1 20050217 AU 2004-							262488 200407					729
						A1 20050217 CA 2004-2534099											
EP	1660	131	•		A1		2006	0531		EP 2	004-	7413	21		2	0040	
							ES,									MC,	PT,
							RO,	-	-		-	-		-		•	•
US	2007	0095	97 [°]	•	A1	A1 20070111 US 2006-566402							•	2	0060	705	
PRIORIT	PRIORITY APPLN. INFO.:													1			
									1	WO 2	004-1	EP85	14	1			
OTHER S	OTHER SOURCE(S):					REAC	T 14	2:24									
GI	• •																

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to an active substance combination comprising at least one compound I [R1-R4 = H, halo, alkyl, etc.; R5 = H, alkyl, (un)saturated cycloalkyl; R6-R9 = H, alkyl, (un)saturated cycloalkyl, etc.;

A = CHR18, CHR18CH2; B = alkyl, (un)saturated cycloalkyl, etc.; R10 = H, alkyl, (un)saturated cycloalkyl, etc.; R11 = alkyl, (un)saturated cycloalkyl, etc.; NR10R11 = (un)saturated heterocyclyl; R18 = H, alkyl, (un)saturated cycloalkyl, etc.] with neuropeptide Y-receptor affinity, preferably neuropeptide Y5-receptor affinity, and at least one compound with 5-HT6 receptor affinity (such as II [R1 = H, alkyl, Ph, CH2PH; R2 = NR4R5, (un)saturated (hetero)cycloalkyl, etc.; R3 = H, alkyl; R4, R5 = H, alkyl; or NR4R5 = (un)saturated heterocyclyl; A = (un)substituted (hetero)aryl; n = 0-4]), a medicament comprising said active substance combination, and the use of said active substance combination for the manufacture of a medicament. Synthesis of amides I and sulfonamides such as II is described in examples. E.g., a multi-step synthesis of III.HCl, starting from 1-(tert-butoxycarbonyl)-4-piperidinone and Me anthranilate, was given. The amides I and sulfonamides such as II were tested against neuropeptide Y5 and 5-HT6 binding (data given for representative compds.).

IT 753020-88-1P 753020-90-5P 753020-91-6P

753020-94-9P 753020-96-1P 753020-97-2P

844477-59-4P 844477-64-1P 844477-68-5P

844477-70-9P 844477-72-1P 844477-79-8P

844477-84-5P 844477-87-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amides and sulfonamides as components of active combination with NPY receptor affinity and $5-{\rm HT}6$ receptor affinity)

RN 753020-88-1 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & N & C1 \\ \hline & S & NH \\ \hline & S & NH \\ \hline & O \\ \end{array}$$

$$\begin{array}{c|c} CH_2-CH_2-NMe_2 \\ \end{array}$$

RN 753020-90-5 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-91-6 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-94-9 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-96-1 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]-

RN 753020-97-2 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-59-4 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-3-methyl- (9CI) (CA INDEX NAME)

$$Me_2N-CH_2-CH_2$$
 $NH-S$
 O
 Me
 O
 Me

RN 844477-64-1 CAPLUS

CN [1,1'-Biphenyl]-4-sulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Ph} & \text{Me}_2\text{N-CH}_2\text{-CH}_2\\ \hline \\ \text{S-NH} & \text{N} \\ \hline \\ \text{O} & \\ \end{array}$$

RN 844477-68-5 CAPLUS

RN 844477-70-9 CAPLUS

CN Benzenesulfonamide, 3,5-dichloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-72-1 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-3-methyl-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

C1
$$N-CH_2-CH_2-N$$

RN 844477-79-8 CAPLUS

CN [1,1'-Biphenyl]-4-sulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-84-5 CAPLUS

CN Benzenesulfonamide, 4-phenoxy-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-87-8 CAPLUS

Benzenesulfonamide, 3,5-dichloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-CN yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:136568 CAPLUS

DOCUMENT NUMBER:

142:240322

TITLE:

Active substance combination comprising a compound with NPY receptor affinity and a compound with 5-HT6

receptor affinity

INVENTOR(S):

Torrens Jover, Antoni; Mas Prio, Josep; Dordal Zueras, Alberto; Codony Soler, Xavier; Merce Vidal, Ramon; Aurelio Castrillo Perez, Jose; Frigola Constansa,

Jordi; Buschmann, Helmut-Heinrich

PATENT ASSIGNEE(S):

Laboratorios del Esteve S. A., Spain

SOURCE:

PCT Int. Appl., 451 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND DATE				APPLICATION NO.							DATE			
WO 2005014000					A1		2005	0217	WO 2004-EP8515							20040729			
	W:	ΑĖ,	AG,	ΑL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	.DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		

```
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
            RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                 SN, TD, TG
                                                           ES 2003-1814
      ES 2228267
                                           20050401
                                                                                           20030730
                                   Α1
      ES 2228267.
                                   В1
                                           20060701
                                   Α1
                                           20050217
                                                           AU 2004-262489
                                                                                           20040729
      AU 2004262489
      CA 2534100
                                   A1
                                           20050217
                                                           CA 2004-2534100
                                                                                           20040729
      EP 1648468
                                   Α1
                                           20060426
                                                           EP 2004-763612
                                                                                           20040729
                 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
      US 2007059364
                                   A1
                                           20070315
                                                           US 2006-566100
                                                                                           20061026
PRIORITY APPLN. INFO.:
                                                           ES 2003-1814
                                                                                      Α
                                                                                          20030730
                                                           WO 2004-EP8515
                                                                                      W
                                                                                          20040729
                                 MARPAT 142:240322
OTHER SOURCE(S):
GΙ
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to an active substance combination comprising at least one compound I [R1-R4 = H, halo, alkyl, etc.; R5 = H, alkyl, (un)saturated (hetero)cycloalkyl; R6-R9 = H, alkyl, (un)saturated (hetero)cycloalkyl, etc.; A = CHR18, CHR18CH2; R10 = H, alkyl, (un)saturated cycloalkyl, etc.; R11 = alkyl, (un)saturated cycloalkyl, etc.; NR10R11 = (un)saturated heterocyclyl; R18 = H, alkyl, (un)saturated cycloalkyl, etc.] with

neuropeptide Y-receptor affinity, preferably neuropeptide Y5-receptor affinity, and at least one compound with 5-HT6 receptor affinity (such as II [R1 = H, alkyl, Ph, CH2PH; R2 = NR4R5, (un)saturated (hetero)cycloalkyl, etc.; R3 = H, alkyl; R4, R5 = H, alkyl; or NR4R5 = (un)saturated heterocyclyl; A = (un)substituted (hetero)aryl; n = 0-4]), a medicament comprising said active substance combination, and the use of said active substance combination for the manufacture of a medicament. Synthesis of amides I and sulfonamides such as II is described in examples. Thus, reacting 6-chloro-1-(4-piperidinyl)-1,4-dihydro-2H-3,1-benzoxazinone hydrochloride with 2-(2-chloroacetamide)-2',5-dichlorobenzophenone in the presence of K2CO3 in DMF followed by treating of the free base with HC1/EtOH afforded 61% III.HC1. The amides I and sulfonamides such as II were tested against neuropeptide Y5 and 5-HT6 binding (data given for representative compds.).

TT 753020-88-1P 753020-90-5P 753020-91-6P 753020-94-9P 753020-96-1P 753020-97-2P 844477-59-4P 844477-64-1P 844477-68-5P 844477-70-9P 844477-72-1P 844477-79-8P 844477-84-5P 844477-87-8P

RN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amides and sulfonamides as components of active combination with NPY receptor affinity and 5-HT6 receptor affinity)
753020-88-1 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-90-5 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-91-6 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-94-9 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & C1 \\
N & S & NH & N & CH_2 - CH_2 - N
\end{array}$$

RN 753020-96-1 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-97-2 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-59-4 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-3-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \mathsf{Me_2N-CH_2-CH_2} \\ \mathsf{N} \\ \mathsf{NH-S} \\ \mathsf{O} \\ \mathsf{Me} \\ \end{array}$$

RN 844477-64-1 CAPLUS

CN [1,1'-Biphenyl]-4-sulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-68-5 CAPLUS

CN Benzenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-4-phenoxy-(9CI) (CA INDEX NAME)

RN 844477-70-9 CAPLUS

CN Benzenesulfonamide, 3,5-dichloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-72-1 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-3-methyl-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-79-8 CAPLUS

CN [1,1'-Biphenyl]-4-sulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-84-5 CAPLUS

CN Benzenesulfonamide, 4-phenoxy-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-87-8 CAPLUS

Benzenesulfonamide, 3,5-dichloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-CN (CA INDEX NAME) yl]- (9CI)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

5

ACCESSION NUMBER:

2005:136548 CAPLUS

DOCUMENT NUMBER:

142:240309

TITLE:

Preparation of indol-6-ylsulfonamide derivatives and

their use as 5-HT6 modulators

INVENTOR(S):

Merce Vidal, Ramon; Codony Soler, Xavier; Dordal

Zueras, Alberto

PATENT ASSIGNEE(S):

Laboratorios del Esteve S. A., Spain

SOURCE:

PCT Int. Appl., 92 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT N			KIN	D :	DATE		i	APPL:	ICAT:	DATE						
WO 20050	A1 20050217				Ī	WO 20	004-1		20040729							
₩:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GĖ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,
•	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,	NI,
	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw
RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,

```
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     ES 2222832
                           Α1
                                  20050201
                                              ES 2003-1810
                                                                       20030730
     ES 2222832
                           В1
                                  20060216
     AU 2004262484
                           Α1
                                  20050217
                                              AU 2004-262484
                                                                       20040729
     CA 2533970
                           A1
                                  20050217
                                              CA 2004-2533970
                                                                       20040729
                                  20060531
                                              EP 2004-741319
                                                                       20040729
     EP 1660077
                           Α1
         R:
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL,
                                                                    SE, MC, PT,
             IE, SI, LT, LV,
                              FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                                              CN 2004-80022271
                                                                       20040729
     CN 1832738
                           Α
                                  20060913
     BR 2004013112
                           Α
                                  20061003
                                              BR 2004-13112
                                                                       20040729
                           Т
                                  20070111
                                                                       20040729
     JP 2007500164
                                              JP 2006-521528
     NO 2006000682
                           Α
                                  20060210
                                              NO 2006-682
                                                                       20060210
     US 2007043041
                           A1
                                  20070222
                                              US 2006-566101
                                                                       20060810
                                              ES 2003-1810
                                                                    Α
                                                                       20030730
PRIORITY APPLN. INFO.:
                                              WO 2004-EP8510
                                                                    W
                                                                       20040729
                          CASREACT 142:240309; MARPAT 142:240309
OTHER SOURCE(S):
GΙ
```

AB Title compds. I [R1 = NR8R9 radical or a (un)saturated, optionally at least monosubstituted cycloaliph. radical which may contain at least one heteroatom; R2-5,7 independently = H, halo, NO2, alkoxy, etc.; R6 = H or (un)saturated aliphatic radical optionally at least monosubstituted; R8 and R9

H or (un)saturated aliphatic radical optionally at least monosubstituted with provisions, or R8 and R9 together with the N atom form a (un)saturated heterocyclic ring optionally at least monosubstituted; A = mono or polycyclic aromatic ring system which may be bonded via (un)substituted alkylene, alkenylene or alkynylene group; n = 0-4], and their pharmaceutically acceptable salts, are prepared and disclosed as useful for medicaments in human and/or veterinary therapeutics for diseases/disorders related to 5-HT6 receptor. Thus, e.g., II was prepared by the reaction of 5-chloro-3-methylbenzo[b]thiophene-2-sulfonyl chloride with 6-amino-1-(2-dimethylaminoethyl)-1H-indole. Selected compds. of the invention were evaluated for binding with 5-HT6 receptor; % inhibition values reported to range from 86.9-98.6 at 10-6M concns. 753020-88-1P 753020-90-5P 753020-91-6P

TT 753020-88-1P 753020-90-5P 753020-91-6P 753020-94-9P 753020-96-1P 753020-97-2P 844477-59-4P 844477-64-1P 844477-68-5P 844477-70-9P 844477-72-1P 844477-79-8P 844477-84-5P 844477-87-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of indol-6-ylsulfonamide derivs. as 5-HT6 receptor modulators)

RN 753020-88-1 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-90-5 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-91-6 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-94-9 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & C1 \\
N & S & NH & N & CH_2 - CH_2 - N
\end{array}$$

RN 753020-96-1, CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-97-2 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-59-4 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-3-methyl- (9CI) (CA INDEX NAME)

RN 844477-64-1 CAPLUS

CN [1,1'-Biphenyl]-4-sulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-68-5 CAPLUS

CN Benzenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-4-phenoxy-(9CI) (CA INDEX NAME)

RN 844477-70-9 CAPLUS

CN Benzenesulfonamide, 3,5-dichloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-72-1 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-3-methyl-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-79-8 CAPLUS

CN [1,1'-Biphenyl]-4-sulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-84-5 CAPLUS

CN Benzenesulfonamide, 4-phenoxy-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 844477-87-8 CAPLUS

CN Benzenesulfonamide, 3,5-dichloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

5

ACCESSION NUMBER: 2004:725572 CAPLUS

DOCUMENT NUMBER: 142:211383

TITLE: Medicinal Chemistry Driven Approaches Toward Novel and

Selective Serotonin 5-HT6 Receptor Ligands

AUTHOR(S): Holenz, Joerg; Merce, Ramon; Diaz, Jose Luis; Guitart,

Xavier; Codony, Xavier; Dordal, Alberto; Romero,
Gonzalo; Torrens, Antoni; Mas, Josep; Andaluz, Blas;
Hernandez, Susana; Monroy, Xavier; Sanchez, Elisabeth;

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

Hernandez, Enrique; Perez, Raquel; Cubi, Roger;

Sanfeliu, Olga; Buschmann, Helmut

CORPORATE SOURCE: Departments of Medicinal Chemistry, Discovery Biology

and Discovery Chemistry, Laboratorios Dr. Esteve S.A.,

Barcelona, 08041, Spain

SOURCE: Journal of Medicinal Chemistry (2005), 48(6),

1781-1795

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:211383

AB Based on a medicinal chemical guided hypothetical pharmacophore model, novel series of indolyl sulfonamides have been designed and prepared as selective and high-affinity serotonin 5-HT6 receptor ligands. Furthermore, based on a screening approach of a discovery library, a series of benzoxazinepiperidinyl sulfonamides were identified as selective 5-HT6

ligands. Many of the compds. described in this paper possess excellent affinities, displaying pKi values greater than 8 (some even >9) and high selectivities against a wide range (>50) of other CNS relevant receptors. First, structure-affinity relationships of these ligands are discussed. In terms of functionality, high-affinity antagonists, as well as agonists and even partial agonists, were prepared Compds. 19c and 19g represent the highest-affinity 5-HT6 agonists ever reported in the literature. These valuable tool compds. should allow for the detailed study of the role of the 5-HT6 receptor in relevant animal models of disorders such as cognition deficits, depression, anxiety, or obesity.

TT 753020-88-1P 753020-89-2P 753020-90-5P 753020-91-6P 753020-93-8P 753020-94-9P 753020-96-1P 753020-97-2P 844477-72-1P

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP

(Preparation)

(medicinal chemical driven approaches toward novel and selective serotonin 5-HT6 receptor ligands)

RN 753020-88-1 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 753020-89-2 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-3-methyl- (9CI) (CA INDEX NAME)

RN 753020-90-5 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{NMe}_2 \\ \hline \text{O} & \text{S}\text{--}\text{NH} \\ \hline \text{O} & \text{O} \end{array}$$

RN 753020-91-6 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(dimethylamino)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-93-8 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-N-[1-[2-(dimethylamino)ethyl]-2-methyl-1H-indol-6-yl]-3-methyl- (9CI) (CA INDEX NAME)

RN 753020-94-9 CAPLUS

CN Imidazo[2,1-b]thiazole-5-sulfonamide, 6-chloro-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & C1 \\
N & S & NH \\
S & NH & N & CH_2 - CH_2 \\
O & O & O & O \\
\end{array}$$

RN 753020-96-1 CAPLUS

CN 1-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 753020-97-2 CAPLUS

CN 2-Naphthalenesulfonamide, N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]-(9CI) (CA INDEX NAME)

RN 844477-72-1 CAPLUS

CN Benzo[b]thiophene-2-sulfonamide, 5-chloro-3-methyl-N-[1-[2-(1-pyrrolidinyl)ethyl]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

68

ACCESSION NUMBER:

2004:412918 CAPLUS

DOCUMENT NUMBER:

140:423584

TITLE:

A preparation of indole derivatives useful in the

INVENTOR(S):

treatment of androgen-receptor related diseases
Hermkens, Pedro Harold Han; Stock, Herman Thijs;
Teachuig Neeltie Miranda: Lemmorse Tehannes Petro

Teerhuis, Neeltje Miranda; Lommerse, Johannes Petrus

Maria; Van der Louw, Jaap

PATENT ASSIGNEE(S):

SOURCE: .

Akzo Nobel N.V., Neth. PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND DATE					APPL	ICAT	ION I		DATE				
WO 2004041782					A1 20040521				1	WO 2	003-1	EP50		20031103				
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	$DZ_{\prime\prime}$	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	
		TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
								TM,										
								ΙE,										
		TR,	BF,					CM,	•				•	MR,	•			TG
	2504							0521							_	0031		
ΑU	J 2003301853			A1		2004	0607		AU 2	003-	3018	53		20031103				
BR	R 2003016020			A 20050920				BR 2003-16020						20031103				
EP 1585727			A1		2005	1019	:	EP 2003-810458						20031103				

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1714078 20051228 CN 2003-80103950 Α 20031103 JP 2006507293 Т 20060302 JP 2004-549180 20031103 NO 2005002012 Α 20050526 NO 2005-2012 20050425 MX 2005PA04929 Α 20050818 MX 2005-PA4929 20050506 US 2006128722 Α1 20060615 US 2005-534945 20050506 LV 13359 В 20060320 LV 2005-68 20050607 PRIORITY APPLN. INFO.: EP 2002-79648 Α 20021107 Ρ US 2002-424579P 20021107 WO 2003-EP50783 W 20031103

OTHER SOURCE(S):

MARPAT 140:423584

GI

$$R^3$$
 R^4
 R^5
 R^1
 R^1
 R^3
 R^4
 R^5
 R^1
 R^1
 R^1
 R^2
 R^3
 R^4
 R^5
 R^5
 R^6
 R^7
 R^7

AB The invention relates to a preparation of indole derivs. of formula I [wherein: X = S, S(0), SO2; R1 is (un)substituted 5- or 6-membered monocyclic, (hetero/homo)cyclic ring; R2 is 2-O2NC6H4, 2-cyanophenyl, 2-hydroxymethylphenyl, pyridin-2-yl, pyridin-2-yl-N-oxide, etc.; R3 is H, halogen or C1-4alkyl; R4 is H, OH, C1-4alkoxy, or halogen; R5 is H, OH, C1-4alkoxy, NH2, CN, halogen, C1-4fluoroalkyl, or NO2, etc.], useful for the treatment of androgen-receptor related diseases. Anti-androgenic activity of the invented compds. was determined in an in vitro bioassay of Chinese hamster ovary (CHO) cells stably transfected with the human androgen receptor expression plasmid and a reporter plasmid in which the MMTV-promoter was linked to the luciferase reporter gene. For instance, indole derivs. II (EC50 < 5 nM; efficacy > 0.8) was prepared via N-benzylation of 6-methoxyindole by 3,5-difluorobenzyl bromide, and subsequent addition of the obtained 1-(3,5-difluorobenzyl)-6-methoxy-1Hindole to 2-nitrobenzenesulfenyl chloride (example 1).

ΙT 691400-43-8P 691400-44-9P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. useful in the treatment of androgen-receptor related diseases)

RN 691400-43-8 CAPLUS

CN

3-Thiophenesulfonamide, N-[1-[(3,5-difluorophenyl)methyl]-3-[(2nitrophenyl)thio]-1H-indol-6-yl]- (9CI) (CA INDEX NAME)

RN 691400-44-9 CAPLUS

CN 1H-Imidazole-4-sulfonamide, N-[1-[(3,5-difluorophenyl)methyl]-3-[(2-nitrophenyl)thio]-1H-indol-6-yl]-1-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ N & & & \\ N & & \\ N & & \\ N & & \\ \end{array}$$

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:389755 CAPLUS

DOCUMENT NUMBER: 139:270249

TITLE: New Analogues of the Anticancer E7070: Synthesis and

Pharmacology

AUTHOR(S): Laconde, G.; Pommery, N.; Depreux, P.; Berthelot, P.;

Henichart, J.-P.

CORPORATE SOURCE: Institut de Chimie Pharmaceutique Albert Lespagnol, EA

2692, Lille, 59006, Fr.

SOURCE: Journal of Enzyme Inhibition and Medicinal Chemistry

(2003), 18(2), 89-94

CODEN: JEIMAZ; ISSN: 1475-6366

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:270249

AB Cell cycle control in the G1 phase has attracted considerable attention in recent cancer research, because many of the important proteins involved in G1 progression or G1/S transition have been found to play a crucial role in proliferation, differentiation, transformation, and programmed cell death (apoptosis). E7070 is a novel antitumor sulfonamide, with a unique mode of action that affects G1 progression of the cell cycle. A series of compds. containing an N-[1-(3,4,5-trimethoxybenzyl)-1H-indol-5-yl]benzene sulfonamide, analogs of E7070, was synthesized and evaluated as potential antitumor agents. Cell cycle anal. with PC3 human prostate cancer cells revealed a cellular accumulation in the G1 phase.

IT 605657-93-0P RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and activity of anticancer E7070 analogs)
605657-93-0 CAPLUS
Benzoic acid, 2-[[[1-[(3,4,5-trimethoxyphenyl)methyl]-1H-indol-6-

yl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

OMe MeO OMe C-OMe CH2 ONE NN

REFERENCE COUNT:

RN

CN

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 215.88 FULL ESTIMATED COST 43.57 SINCE FILE TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) ENTRY SESSION -6.24CA SUBSCRIBER PRICE -6.24

FILE 'STNGUIDE' ENTERED AT 11:17:48 ON 18 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul 13, 2007 (20070713/UP).

=> d his

(FILE 'HOME' ENTERED AT 11:15:22 ON 18 JUL 2007)

FILE 'REGISTRY' ENTERED AT 11:15:40 ON 18 JUL 2007

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 20 S L1 FULL

FILE 'CAPLUS' ENTERED AT 11:16:07 ON 18 JUL 2007

L4 8 S L3 FULL

FILE 'STNGUIDE' ENTERED AT 11:17:48 ON 18 JUL 2007

=> log y SINCE FILE COST IN U.S. DOLLARS TOTAL SESSION ENTRY FULL ESTIMATED COST 0.90 216.78 SINCE FILE TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -6.24 Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
                Web Page for STN Seminar Schedule - N. America
NEWS 2 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 3 MAR 16 CASREACT coverage extended
                                                  13.17.24
                                                                ここ こうれくつかれ
NEWS 4 MAR 20 MARPAT now updated daily
NEWS 5 MAR 22 LWPI reloaded
NEWS 6 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 7 APR 02 JICST-EPLUS removed from database clusters and STN
NEWS 8 APR 30 GENBANK reloaded and enhanced with Genome Project ID field
        APR 30
NEWS 9
                CHEMCATS enhanced with 1.2 million new records
NEWS 10 APR 30
                CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 11 APR 30
                INPADOC replaced by INPADOCDB on STN
NEWS 12
        MAY 01
                New CAS web site launched
NEWS 13
        MAY 08
                CA/CAplus Indian patent publication number format defined
NEWS 14 MAY 14
                RDISCLOSURE on STN Easy enhanced with new search and display
                 fields
NEWS 15
        MAY 21
                BIOSIS reloaded and enhanced with archival data
NEWS 16
        MAY 21
                TOXCENTER enhanced with BIOSIS reload
NEWS 17
       MAY 21
                CA/CAplus enhanced with additional kind codes for German
                patents
NEWS 18 MAY 22
                CA/CAplus enhanced with IPC reclassification in Japanese
                patents
NEWS 19
        JUN 27
                CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 20 JUN 29
                STN Viewer now available
NEWS 21 JUN 29 STN Express, Version 8.2, now available
NEWS 22 JUL 02 LEMBASE coverage updated
NEWS 23 JUL 02 LMEDLINE coverage updated
NEWS 24 JUL 02 SCISEARCH enhanced with complete author names
NEWS 25 JUL 02 CHEMCATS accession numbers revised
NEWS 26 JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS 27
        JUL 16
                CAplus enhanced with French and German abstracts
        JUL 18 CA/CAplus patent coverage enhanced
NEWS 28
NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP).
             AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007. .
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
             Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may

result in loss of user privileges and other penalties.

* * SŤN Columbus

FILE 'HOME' ENTERED AT 06:10:24 ON 18 JUL 2007

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE

SESSION ENTRY

TOTAL

FULL ESTIMATED COST

0.42 0.42

FILE 'CAPLUS' ENTERED AT 06:11:36 ON 18 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Jul 2007 VOL 147 ISS 4 FILE LAST UPDATED: 17 Jul 2007 (20070717/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 5-HT6 receptor? 6434990 5

620 HT6

843913 RECEPTOR?

L1361 5-HT6 RECEPTOR?

(5 (W) HT6 (W) RECEPTOR?)

=> s 11 and py<2003 22885857 PY<2003

1.2 142 L1 AND PY<2003

=> s 12 and disorder?

458949 DISORDER?

56 L2 AND DISORDER? L3

=> s 13 and diseas?

1095185 DISEAS?

31 L3 AND DISEAS?

=> d ibib abs hitstr 1-10

ANSWER 1 OF 31 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:802568 CAPLUS

DOCUMENT NUMBER:

141:296050

TITLE:

Preparation of 1-alkylsulfonylheterocyclylbenzazoles and related compounds as 5-hydroxytryptamine-6 ligands

INVENTOR(S):

Kelly, Michael Gerard; Cole, Derek Cecil

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

126. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:71.

- 127. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:72.
- 128. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:73.
 - 129. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:74.
 - 130. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:75.

131. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:76.

- 132. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:77.
- 133. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:78.
 - 134. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:79.
 - 135. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:80.

136. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:81.

- 137. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:82.
 - 138. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:83.
- 30 139. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:84.
 - 140. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:85.

5

10

141. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:86.

- 142. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ IDNO:87.
 - 143. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:88.
- 144. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ IDNO:89.
 - 145. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:90.
 - 146. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:91.

15

- 147. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ IDNO:92.
 - 148. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:93.
- 149. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:94.
 - 150. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:95.
 - 151. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:96.
- 152. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:97.

153. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:98.

- 154. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 5 NO:99.
 - 155. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:100.
- 10 156. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:101.
 - 157. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:102.
 - 158. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:103.

15

- 159. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:104.
 - 160. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:105.
- 25 161. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:106.
 - 162. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:107.
 - 163. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:108.
- 164. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:109.

165. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:110.

- 166. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:111.
 - 167. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:112.
- 10 168. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:113.
 - 169. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:114.
 - 170. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:115.

15

- 171. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ IDNO:116.
 - 172. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:117.
- 25 173. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:118.
 - 174. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:119.
 - 175. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:120.
- 176. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:121.

177. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:122.

- 178. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 5 NO:123.
 - 179. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:124.
- 10 180. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:125.
 - 181. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:126.
 - 182. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:127.

15

- 183. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 20 NO:128.
 - 184. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:129.
- 25 185. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:130.
 - 186. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:131.
 - 187. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:132.
- 188. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:133.

189. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:134.

- 190. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ IDNO:135.
 - 191. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:136.
- 10 192. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:137.
 - 193. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:138.

15

- $194.\,$ A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:139.
- 195. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID20 NO:140.
 - 196. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:141.
- 25 197. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:142.
 - 198. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:143.
 - 199. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:144.
- 200. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 35 NO:145.

201. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:146.

- 202. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 5 NO:147.
 - 203. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:148.
- 10 204. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:149.
 - 205. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:150.
 - 206. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:151.

15

- 207. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 20 NO:152.
 - 208. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:153.
- 25 209. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:154.
 - 210. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:155.
 - 211. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:156.
- 212. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID 35 NO:157.

213. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:158.

- 214. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ IDNO:159.
 - 215. A polynucleotide of claim 12, comprising the polynucleotide sequence of SEQ ID NO:160.

<110> INCYTE GENOMICS, INC. TANG, Y. Tom WARREN, Bridget A. GIETZEN, Kimberly J. LAL, Preeti G. YUE, Henry HONCHELL, Cynthia D. LEHR-MASON, Patricia M. BURFORD, Neil XU, Yuming BAUGHN, Mariah R. DUGGAN, Brendan M. TRAN, Uyen K. LEE, Ernestine A. FORSYTHE, Ian J. RICHARDSON, Thomas W. LEE, Sally THANGAVELU, Kavitha YUE, Huibin EMERLING, Brooke M. WALIA, Narinder K. AZIMZAI, Yalda SANJANWALA Bharati HAFALIA, April J.A. BOROWSKY, Mark L. NGUYEN, Danniel B. ISON, Craig H. ASTROMOFF, Anna DING, Li LEE, Soo Yeun BECHA, Shanya D. RAMKUMAR, Jayalaxmi GANDHI, Ameena R. JIN, Pei FU, Glenn K. SWARNAKAR, Anita

- <120> SECRETED PROTEINS
- <130> PF-1141 PCT
- <140> To Be Assigned
- <141> Herewith
- <150> US 60/313,249
- <151> 2001-08-17
- <150> US 60/314,752
- <151> 2001-08-24
- <150> US 60/317,818
- <151> 2001-09-07
- <150> US 60/317,824
- <151> 2001-09-07
- <150> US 60/324,040
- <151> 2001-09-21
- <150> US 60/324,586
- <151> 2001-09-24
- <150> US 60/343,980
- <151> 2001-11-02

```
<150> US 60/334,229
<151> 2001-11-28
<150> US 60/357,002
<151> 2002-02-13
<150> US 60/362,439
<151> 2002-03-06
<150> US 60/366,041
<151> 2002-03-19
<150> US 60/376,988
<151> 2002-04-30
<160> 160
<170> PERL Program
<210> 1
<211> 269
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1417062CD1
<400> 1
Met Leu Leu Asp Leu Met Ser Ser Pro Ser Pro Gln Leu Leu
                                      10
Val Ala Ala Gln Gln Thr Leu Gly Met Gly Lys Arg Arg Ser
                 20
Pro Pro Gln Ala Ile Cys Leu His Leu Ala Gly Glu Val Leu Ala
                 35
                                      40
                                                          45
Val Ala Arg Gly Leu Lys Pro Ala Val Leu Tyr Asp Cys Asn Cys
                 50
                                      55
                                                          60
Ala Gly Ala Ser Glu Leu Gln Ser Tyr Leu Glu Glu Leu Lys Gly
                 65
                                      70
Leu Gly Phe Leu Thr Phe Gly Leu His Ile Leu Glu Ile Gly Glu
                 80
                                      85
Asn Ser Leu Ile Val Ser Pro Glu His Val Cys Gln His Leu Glu
                 95
                                     100
                                                         105
Gln Val Leu Leu Gly Thr Ile Ala Phe Val Asp Val Ser Ser Cys
                110
                                    115
                                                         120
Gln Arg His Pro Ser Val Cys Ser Leu Asp Gln Leu Gln Asp Leu
                125
                                     130
                                                         135
Lys Ala Leu Val Ala Glu Ile Ile Thr His Leu Gln Gly Leu Gln
                140
                                     145
Arg Asp Leu Ser Leu Ala Val Ser Tyr Ser Arg Leu His Ser Ser
                155
                                     160
                                                         165
Asp Trp Asn Leu Cys Thr Val Phe Gly Ile Leu Leu Gly Tyr Pro
                170
                                     175
                                                         180
Val Pro Tyr Thr Phe His Leu Asn Gln Gly Asp Asp Asn Cys Leu
                185
                                     190
                                                         195
Ala Leu Thr Pro Leu Arg Val Phe Thr Ala Arg Ile Ser Trp Leu
                200
                                    205
                                                         210
Leu Gly Gln Pro Pro Ile Leu Leu Tyr Ser Phe Ser Val Pro Glu
                215
                                     220
                                                         225
Ser Leu Phe Pro Gly Leu Arg Asp Ile Leu Asn Thr Trp Glu Lys
                230
                                    235
                                                         240
Asp Leu Arg Thr Arg Phe Arg Thr Gln Asn Asp Phe Ala Asp Leu
                245
                                    250
                                                         255
Ser Ile Ser Ser Glu Ile Val Thr Leu Pro Ala Val Ala Leu
                260
```

<210> 2

```
<211> 127
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2007701CD1
<400> 2
Met Thr Thr Asn Leu Asp Leu Lys Val Ser Met Leu Ser Phe Ile
                                      10
Ser Ala Thr Cys Leu Leu Leu Cys Leu Asn Leu Phe Val Ala Gln
                 20
                                      25
                                                          30
Val His Trp His Thr Arg Asp Ala Met Glu Ser Asp Leu Leu Trp
Thr Tyr Tyr Leu Asn Trp Cys Ser Asp Ile Phe Tyr Met Phe Ala
                 50
                                      55
Gly Ile Ile Ser Leu Leu Asn Tyr Leu Thr Ser Arg Ser Pro Ala
                 65
                                      70
Cys Asp Glu Asn Val Thr Val Ile Pro Thr Glu Arg Ser Arg Leu
                 80
                                      85
Gly Val Gly Pro Val Thr Thr Val Ser Pro Ala Lys Asp Glu Gly
                 95
                                     100
                                                         105
Pro Arg Ser Glu Met Glu Ser Leu Ser Val Arg Glu Lys Asn Leu
                110
                                                         120
Pro Lys Ser Gly Leu Trp Trp
                125
<210> 3
<211> 71
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2915695CD1
<400> 3
Met Leu His Ile Thr Ser Leu Phe Leu Trp Leu Leu Ala Gly Ala
                                      10
Val Leu Gln Ala Thr Gly His Ser Leu Gly Leu Arg Pro Ala Ser
                 20
                                      25
                                                          30
Pro Val Phe His Arg Glu Val Arg Cys Ile Gly Trp Val Arg Cys
                 35
                                     40
                                                          45
Leu Phe Cys Ser Ile Ile Ser Ser Phe Leu Met Cys Lys Asn Gly
                                                          60
Arg Leu Glu Thr Val Ser Asp Ser Lys Ala Thr
                 65
                                     70
<210> 4
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2969449CD1
<400> 4
Met Leu Leu His Gly Phe Trp Thr Cys Cys Ser Leu Ala Pro
Ala Val Ala Gln Lys Ala Val Leu Ala Ala Leu Ala Pro Phe Arg
                 20
                                     25
Ser Phe Phe Arg Tyr Tyr Leu Leu Gly Glu Ser Phe Leu Thr Thr
                                     40
Leu Phe Lys Ala His His Ala Ser Pro Thr Thr Pro His Val Pro
```

```
50
                                      55
Ser Trp Pro Glu Phe Phe His Ser Thr Asp Cys Asn Gln Tyr Thr
                 65
                                      70
Leu Tyr Val Phe Tyr Val Phe Thr
                 80
<210> 5
<211> 306
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2994102CD1
<400> 5
Met Gly Glu Asp Ser Pro Val Ala Met Phe Ser Trp Tyr Leu Asp
                                      10
Asn Thr Pro Thr Glu Gln Ala Glu Pro Leu Pro Asp Ala Cys Arg
                 20
                                      25
Leu Arg Gly Phe Trp Pro Arg Ser Leu Thr Leu Leu Gln Ser Asn
                 35
                                      40
Thr Ser Thr Leu Leu Leu Asn Ser Ser Phe Leu Gln Ser Arg Gly
Glu Val Ile Arg Ile Arg Ala Thr Ala Leu Thr Arg His Ala Tyr
                 65
                                      70
Gly Glu Asp Thr Tyr Val Ile Ser Thr Val Pro Pro Arg Glu Val
                 80
                                      85
                                                           90
Pro Ala Cys Thr Ile Ala Pro Glu Glu Gly Thr Val Leu Thr Ser
                 95
                                     100
                                                          105
Phe Ala Ile Phe Cys Asn Ala Ser Thr Ala Leu Gly Pro Leu Glu
                110
                                     115
Phe Cys Phe Cys Leu Glu Ser Gly Ser Cys Leu His Cys Gly Pro
                125
                                     130
Glu Pro Ala Leu Pro Ser Val Tyr Leu Pro Leu Gly Glu Glu Asn
                140
                                     145
                                                          150
Asn Asp Phe Val Leu Thr Val Val Ile Ser Ala Thr Asn Arg Ala
                155
                                     160
                                                          165
Gly Asp Thr Gln Gln Thr Gln Ala Met Ala Lys Val Ala Leu Gly
                170
                                     175
                                                          180
Asp Thr Cys Val Glu Asp Val Ala Phe Gln Ala Ala Val Ser Glu
                185
                                     190
                                                          195
Lys Ile Pro Thr Ala Leu Gln Gly Glu Gly Pro Glu Gln Leu
                200
                                     205
                                                          210
Leu Gln Leu Ala Lys Ala Val Ser Ser Met Leu Asn Gln Glu His
                215
                                     220
                                                          225
Glu Ser Gln Gly Ser Gly Gln Ser Leu Ser Ile Asp Val Arg Gln
                230
                                     235
Lys Val Arg Glu His Val Leu Gly Ser Leu Ser Ala Val Thr Thr
                245
                                     250
                                                          255
Gly Leu Glu Asp Val Gln Arg Val Gln Glu Leu Ala Glu Val Leu
                260
                                     265
                                                          270
Arg Glu Val Thr Cys Arg Ser Lys Glu Leu Thr Pro Ser Ala Gln
                275
                                     280
                                                          285
Gly Ser Cys Met Gly Asp Ser Trp Glu Gly Ala Pro Pro Ala Ala
                290
                                     295
                                                          300
His Val Ser His Ala Arg
                305
<210× 6
<211> 334
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3410251CD1
```

<400> 6

```
Met Arg Gly Pro Ser Trp Leu Arg Pro Arg Pro Leu Leu Leu
Leu Leu Leu Ser Pro Trp Pro Val Trp Ala His Val Ser Ala
 Thr Ala Ser Pro Ser Gly Ser Leu Gly Ala Pro Asp Cys Pro Glu
                  35
Val Cys Thr Cys Val Pro Gly Gly Leu Ala Ser Cys Ser Ala Leu
                  50
                                      55
 Ser Leu Pro Ala Val Pro Pro Gly Leu Ser Leu Arg Leu Arg Ala
                  65
                                       70
Leu Leu Leu Asp His Asn Arg Val Arg Ala Leu Pro Pro Gly Ala
                  ጸስ
                                      85
 Phe Ala Gly Ala Gly Ala Leu Gln Arg Leu Asp Leu Arg Glu Asn
                  95
                                      100
Gly Leu His Ser Val His Val Arg Ala Phe Trp Gly Leu Gly Ala
                 110
                                     115
Leu Gln Leu Leu Asp Leu Ser Ala Asn Gln Leu Glu Ala Leu Ala
                 125
                                     130
 Pro Gly Ala Phe Ala Pro Leu Arg Ala Leu Arg Asn Leu Ser Leu
                 140
                                     145
Ala Gly Asn Arg Leu Ala Arg Leu Glu Pro Ala Ala Leu Gly Ala
                 155
                                     160
Leu Pro Leu Leu Arg Ser Leu Ser Leu Gln Asp Asn Glu Leu Ala
                 170
                                     175
                                                          180
Ala Leu Ala Pro Gly Leu Leu Gly Arg Leu Pro Ala Leu Asp Ala
                 185
                                     190
Leu His Leu Arg Gly Asn Pro Trp Gly Cys Gly Cys Ala Leu Arg
                 200
                                     205
                                                          210
 Pro Leu Cys Ala Trp Leu Arg Arg His Pro Leu Pro Ala Ser Glu
                 215
                                     220
Ala Glu Thr Val Leu Cys Val Trp Pro Gly Arg Leu Thr Leu Ser
                 230
                                     235
                                                          240
 Pro Leu Thr Ala Phe Ser Asp Ala Ala Phe Ser His Cys Ala Gln
                 245
                                     250
                                                          255
 Pro Leu Ala Leu Arg Asp Leu Ala Val Val Tyr Thr Leu Gly Pro
                 260
                                     265
                                                          270
Ala Ser Phe Leu Val Ser Leu Ala Ser Cys Leu Ala Leu Gly Ser
                 275
                                     280
                                                          285
Gly Leu Thr Ala Cys Arg Ala Arg Arg Arg Leu Arg Thr Ala
                 290
                                     295
                                                          300
Ala Leu Arg Pro Pro Arg Pro Pro Asp Pro Asp Pro Asp Pro Asp
                 305
                                     310
                                                          315
Pro His Gly Cys Ala Ser Pro Ala Asp Pro Gly Ser Pro Ala Ala
                                     325
                 320
                                                          330
· Ala Ala Gln Ala
 <210> 7
 <211> 950
 <212> PRT
 <213> Homo sapiens
<220>
 <221> misc_feature
<223> Incyte ID No: 5330327CD1
```

Tyr	Gly	Thr	Leu	Arg	Lys	Gly	Ser	Val	Cys	Ala	Asp	Pro	Lys	Pro 75
Gln	Gln	Val	Lys	Lys 80	Ile	Phe	Glu	Ala	Leu 85	Lys	Arg	Gly	Leu	
Glu	Tyr	Leu	Cys		Gln	Gln	Ala	Glu		qaA	His	Leu	Ser	
Arg	His	Lys	Asp	Thr 110	Arg	Arg	Asn	Ser	Arg 115	Leu	Ala	Phe	Tyr	
Asp	Leu	Asp	Lys	Gln 125	Thr	Arg	Суѕ	Val	Glu 130	Arg	His	Ile	Arg	Lys 135
Met	Glu	Phe	His	Ile 140	Ser	ГЛЗ	Val	Asp	Glu 145	Leu	Tyr	Glu	Asp	Tyr 150
	Ile			155					160					165
	Phe			170				•	175					180
	Glu			185					190			_		195
	Ile			200				•	205		-		,	210
	Met		_	215				_	220	_	٠.			225
	Tyr			230		_		-	235			_	-	240
_	Gly	_		245		_	_		250		_	_		255
	Lys			260					265					270
	Thr			275	_		_		280			_		285
	Cys			290					295					300
	Val			305	_			_	310					315
	Gln	_		320		_			325					330
	Pro			.335					340		-			345
	Asn		_	350		_			355					360
_	Leu			365					370					375
	Gly			380					385				_	390
_	Leu			395			_		400					405
	Met 			410					415					420
	Thr			425					430					435
	Gly			440					445		_		_	450
	Pro			455					460					465
	Phe			470		_	_		475		_	-		480
	Ser			485					490		_			495
	Ser			500					505		_	-	_	510
	Gly			515					520					525
	Leu			530					535					540
	Glu			545					550					Cys 555
Arg	Ala	Arg	Gln	Glu	His	Thr	Ser	Ala	Glu	Ser	Leu	Met	Glu	

```
560
                                     565
                                                          570
Ile Leu Glu Ser Phe Ala Phe Leu Asn Ala Asp Phe Ala Pro Asp
                575
                                     580
Glu Leu Ser Leu Phe Gly Gly Ser Gln Gly Leu Arg Lys Asp Arg
                590
                                     595
Pro Leu Pro Pro Pro Ser Ser Leu Lys Ala Ser Ser Arg Glu Leu
                605
Thr Ala Gly Ala Pro Glu Leu Asp Val Leu Leu Met Val His Leu
                620
                                     625
Gln Val Cys Lys Ala Leu Leu Gln Lys Leu Ala Ser Pro Asn Leu
                635
                                     640
                                                          645
Ser Arg Leu Val Gln Glu Cys Leu Leu Glu Glu Val Ala Gln Gln
                650
                                     655
                                                          660
Lys His Val Leu Glu Thr Leu Ser Val Leu Asp Phe Glu Lys Val
                665
                                     670
                                                          675
Gly Lys Ala Thr Ser Ile Glu Glu Ile Ile Pro Gln Ala Ser Arq
                680
                                     685
                                                          690
Thr Lys Gly Cys Leu Lys Leu Trp Arg Gly Cys Thr Gly Pro Gly
                695
                                     700
                                                          705
Arg Val Leu Ser Cys Pro Ala Thr Thr Leu Leu Asn Gln Leu Lys
                710
                                     715
                                                          720
Lys Thr Phe Gln His Arg Val Arg Gly Lys Tyr Pro Gly Gln Leu
                725
                                     730
                                                          735
Glu Ile Ala Cys Arg Arg Leu Leu Glu Gln Val Val Ser Cys Gly
                740
                                     745
                                                         750
Gly Leu Leu Pro Gly Ala Gly Leu Pro Glu Glu Gln Ile Ile Thr
                755
                                     760
Trp Phe Gln Phe His Ser Tyr Leu Gln Arg Gln Ser Val Ser Asp
                770
                                     775
                                                          780
Leu Glu Lys His Phe Thr Gln Leu Thr Lys Glu Val Thr Leu Ile
Glu Glu Leu His Cys Ala Gly Gln Ala Lys Val Val Arg Lys Leu
                800
                                     805
Gln Gly Lys Arg Leu Gly Gln Leu Gln Pro Leu Pro Gln Thr Leu
                815
                                     820
                                                         825
Arg Ala Trp Ala Leu Leu Gln Leu Asp Gly Thr Pro Arg Val Cys
                830
                                    835
                                                         840
Arg Ala Ala Ser Ala Arg Leu Ala Gly Ala Val Arg Asn Arg Ser
                                     850
                                                         855
Phe Arg Glu Lys Ala Leu Leu Phe Tyr Thr Asn Ala Leu Ala Glu
                860
                                     865
Asn Asp Ala Arg Leu Gln Gln Ala Ala Cys Leu Ala Leu Lys His
                875
                                     880
Leu Lys Gly Ile Glu Ser Ile Asp Gln Thr Ala Ser Leu Cys Gln
                890
                                    895
Ser Asp Leu Glu Ala Val Arg Ala Ala Ala Arg Glu Thr Thr Leu
                905
                                     910
                                                         915
Ser Phe Gly Glu Lys Gly Arg Leu Ala Phe Glu Lys Met Asp Lys
                920
                                    925
                                                         930
Leu Cys Ser Glu Gln Arg Glu Val Phe Cys Gln Glu Ala Asp Val
                935
Glu Ile Thr Ile Phe
                950
<210> 8
<211> 546
<212> PRT
<213> Homo sapiens
<221> misc_feature
<223> Incyte ID No: 5532048CD1
Met Asp Pro Lys Ala Gly Gly Gly Glu Glu Asp Asp Cys Val
```

Asp Ser Gly Ala Glu Thr Gly Gly Ser Asp Tyr Ser His Leu Ser

				20					25					30
Ser	Thr	Ser	Ser		Leu	Ser	Val	Glu		Ala	Gln	Asp	Pro	Phe 45
Leu	Val	Ser	Ile		Ile	Ile	Ala	Asp		Gly	Glu	Ser	Gln	Pro 60
Leu	Gln	Glu	Ala	Ile 65	Asp	Asn	Val	Leu		Trp	Ile	His	Pro	
Leu	Pro	Leu	Phe	Arg 80	Val	Ser	Glu	Arg	Arg 85	Ala	Ser	Arg	Arg	Arg 90
Arg	Lys	Pro	Pro	Lys 95	Gly	Ala	Gln	Pro	Ala 100	Leu	Ala	Val	Val	Leu 105
Phe	Leu	Gln	Glu	Glu 110	Tyr	Gly	Glu	Glu	Gln 115	Ile	Leu	Gln	Leu	His 120
				125				Arg	130					135
				140				Leu	145				_	150
				155				Leu	160					165
		•		170				Phe	175					180
			•	185		-		Phe	190					195
				200				Asp	205					210
				215				Gln	220			_	_	225
				230				Thr	235					240
				245			•	Leu	250					255
				260				Arg	265					270
				275				Ala	280	_			_	285
				290				His	295					300
		-		305				Ala	310					315
				320				Asn	325	-				330
				335				His	340					345
				350				Pro	355				-	360
				365				Gly	370					375
				380				Asn	385					390
				395				His	400					405
				410				Val	415					420
				425				Ser -	430					435
				440				Pro	445					450
				455				Asp	460					465
				470				Glu	475					480
				485				Ser	490					495
				500				Ser	505					510
ETO	. 	neu	PT0	515	ASD	ınr	PTO	Lys	Val 520	тАв	GIN	ınr	Asp	525

```
Asp Met Pro Pro Pro Pro Gly Ser Ala Gly Pro Gly Asp Asn Asp
                 530
                                     535
Met Glu Glu Phe Tyr Ile
                 545
<210> 9
<211> 226
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 56002716CD1
Met Lys His Phe Leu Val Thr Leu Ile Thr Leu Thr Ala Thr Thr
                                      10
Leu Thr Ala His Ala Ala Arg Val Pro Asp Phe Asp Ser Leu Thr
                  20
                                      25
                                                           30
Arg Val Ser Cys Ser Gly Gly Arg Gly Gly Gly Ser Cys Val Gly
                  35
                                      40
                                                           45
Val Pro Tyr Ile Gly Tyr His Cys Val Leu Asp Gln Leu Lys Asp
                  50
                                      55
Gly Ser Arg Thr Ala Asn Ala Leu Pro Thr Gly Ser Glu Arg Ile
                  65
                                      70
Cys Asp Gly Ala Gly Cys Asp Pro Arg Asp Ser Val Ile Pro Val
                 ·80
                                      85
                                                           90
Tyr Ala Thr Ser Thr Ile Asp Val Glu Val Asn Ala Asn Leu Arg
                                     100
                                                          105
Gly Val Ser Arg Arg Phe Asp Thr Ser Phe Pro Pro Thr Val Thr
                110
                                     115
Glu Glu Leu Asn Thr Met Gly Asn Ile Gly Ser Val Glu Asn Leu
                125
                                     130
                                                          135
Glu Pro Gly Ser Ala Gly Phe Ala Arg Ile Leu Arg Ala Phe Gly
                140
                                     145
                                                          150
Gly Lys Gln Thr Ser Gly Met Ser Pro Ala Glu Ala Arg Ala Val
                 155
                                     160
                                                          165
Thr Leu Val Lys Val Tyr His Ile Asp Asp Ala His Asp Glu Val
                170
                                     175
Glu Asp Glu Lys Ser Ala Ala Ala Pro Glu Leu Leu Ile Arg Phe
                185
                                     190
                                                          195
Phe Arg Gly Glu Glu Gln Val Gly Gly Ser Val Leu Glu Arg Asp
                200
                                     205
                                                          210
Leu Lys Gly Leu Pro Ser Lys Thr Arg Ala Arg Ile Cys Thr Lys
                215
                                     220
                                                          225
Ile
<210> 10
<211> 130
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 60129797CD1
<400> 10
Met Ser Pro Val Cys Pro Pro Ser Pro Val Val Leu Ala Cys Leu
Val Ser Ser Pro His Val Pro Ala Ser Leu Thr Pro Pro Pro Thr
                 20
                                      25
Arg Gly Ser Pro Glu Ile Ala Glu Asn Ser Lys Arg Ser Pro Gly
                 35
                                      40
                                                          45
Thr Gly Lys Lys Ser Arg Gln Gly Arg Leu Arg Ser Leu His Pro
                 50
                                      55
Ser Leu Leu Pro Ser Leu His Pro Asp Pro Ala Gln Thr Phe Val
```

```
65
Thr Thr Pro Ser Leu Ser Pro Ala Gly Trp Val Gly Gly Ile Pro
                 80
                                                           90
                                      85
Leu Cys Arg Trp Leu Pro Glu Ala Gly Gln Ala Ser Trp Ser
                                                         Cys
                 95
                                     100
                                                          105
Pro Arg Ser Trp Arg Ser Pro Cys His Ser Asp Pro Pro His Thr
                110
                                     115
                                                          120
Pro Gly Gly Ala Ala Leu His Pro Gly Ser
                125
<210> 11
<211> 195
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6246243CD1
<400> 11
Met Ala Val Ser Gln Gly Asp Gly Thr Leu Cys Phe Val Leu Leu
                                                           15
                                      10
Leu Cys Cys Trp Gln Glu Thr Glu Leu Arg Pro Arg Thr Val Ile
                 20
                                      25
Pro Gly Ser Pro Thr Glu Ile Pro Phe Ser Ser Lys Gln Glu Asp
                 35
                                      40
Met Ser Glu Leu Leu Asp Glu Ile Leu Val Gln Glu Ile Leu Asp
                 50
                                      55
                                                           60
Leu Asn Lys Thr Thr Pro Ser Glu Met Pro Ser Thr Ala Ser Thr
                                                           75
Leu Ser Thr Pro Leu His Ala Gly Ile Asp Glu Asn Tyr Gln Ala
                 80
                                      85
Gly Gly Ser Glu Asn Tyr His Glu Leu Leu Glu Asn Leu Gln Phe
                 95
                                     100
                                                          105
Ser Pro Gly Ile Glu Val Lys Ile Ser Asn Asp Glu Ala Asn Ala
                110
                                     115
                                                         120
Asn Ala Asn Leu His Gly Asp Pro Ser Glu Asn Tyr Arg Gly Pro
                125
                                     130
                                                         135
Gln Val Ser Pro Gly Ser Glu Lys Ser Val Ser Ser Lys Glu Lys
                140
                                     145
                                                         150
Asn Ser Lys Asn Thr Gln Tyr Glu Asn Leu Ser Ile Leu Asp Gln
                155
                                     160
                                                         165
Ile Leu Gln Asn Ile Gly Arg Ser Ser Gly Asn Ile Phe His Lys
                170
                                     175
                                                         180
Glu Gln Gln Arg Thr Ser Ala Gln Arg Arg Ser Gln Gly Ser Gln
                185
                                                         195
<210> 12
<211> 112
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6804755CD1
<400> 12
Met Cys Cys Trp Leu Lys Ser Met Lys Lys Ile Gln Pro Trp Leu
Arg Met Leu Pro Ala Leu Ser Gly Ala Cys Ser Gly Leu Gln Pro
Ser Lys Ala Ala Val Cys Pro Ser Glu His Gly Ser Lys Arg Cys
                 35
                                      40
Pro His Ala Met Gly Phe Asp Leu Ile Ile Cys Leu Glu Gly Ser
Gln Ala Leu His Glu Ser Pro Glu Gln Asp Trp Gln Pro Leu Leu
```

```
65
                                      70
Arg Gly Trp Thr Arg Ile His Arg Pro Phe Ser Gln Ser Gly Met
                 80
                                      85
                                                           90
Gly Arg Leu Tyr Cys Ser Tyr Ser Ala Ser Leu Asp Asn Pro Arg
                 95
                                     100
Phe Leu Asp Ser Phe Leu Gly
                 110
<210> 13
<211> 107
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6856852CD1
<400> 13
Met Thr Gly Leu Trp Ala Val Leu Ser Leu Leu Ala Gly Leu Leu
                                      10
Gly Arg Ala Pro Ser Pro Ser Pro Arg Glu Val Arg Leu Arg Gln
                 20
                                      25
                                                          30
Ala Asp Gly Pro Ser Gly Lys Gly His Leu Lys Arg Gln Glu Ala
                  35
                                      40
Arg Ala Val Asn Pro Gly Asp Gly Glu Ala Asp Gly Val Gly Gly
                 50
                                      55
                                                           60
Lys Asp Phe Ala Leu Val Asp Phe Phe Gln Lys Gly Trp Lys Gln
                 65
                                      70
Leu Arg Leu Asn Tyr Leu Gly Thr Cys Pro Gly His Leu Leu Leu
                 ጸበ
                                      85
                                                          90
Thr Ser Cys Met Thr Leu Gly Lys Ser Arg Thr Leu Gly Phe Trp
                                     100
                                                         105
Phe Leu
<210> 14
<211> 221
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7482027CD1
<400> 14
Met Pro Leu Ala Leu Thr Leu Leu Leu Ser Gly Leu Gly Ala
Pro Gly Gly Trp Gly Cys Leu Gln Cys Asp Pro Leu Val Leu Glu
                 20
                                      25
Ala Leu Gly His Leu Arg Ser Ala Leu Ile Pro Ser Arg Phe Gln
                 35
                                      40
Leu Glu Gln Leu Gln Ala Arg Ala Gly Ala Val Leu Met Gly Met
                 50
                                      55
                                                          60
Glu Gly Pro Phe Phe Arg Asp Tyr Ala Leu Asn Val Phe Val Gly
                  65
                                      70
Lys Val Glu Thr Asn Gln Leu Asp Leu Val Ala Ser Phe Val Lys
                 80
                                      85
                                                          90
Asn Gln Thr Gln His Leu Met Gly Asn Ser Leu Lys Asp Glu Pro
                 95
                                     100
                                                         105
Leu Leu Glu Glu Leu Val Thr Leu Arg Ala Asn Val Ile Lys Glu
                110
                                     115
                                                         120
Phe Lys Lys Val Leu Ile Ser Tyr Glu Leu Lys Ala Cys Asn Pro
                125
                                                         135
                                     130
Lys Leu Cys Arg Leu Leu Lys Glu Glu Val Leu Asp Cys Leu His
                140
                                     145
                                                         150
Cys Gln Arg Ile Thr Pro Lys Cys Ile His Lys Lys Tyr Cys Phe
                155
                                    160
                                                         165
```

```
Val Asp Arg Gln Pro Arg Val Ala Leu Gln Tyr Gln Met Asp Ser
                170
Lys Tyr Pro Arg Asn Gln Ala Leu Leu Gly Ile Leu Ile Ser Val
                185
                                     190
                                                          195
Ser Leu Ala Val Phe Val Phe Val Val Ile Val Val Ser Ala Cys
                200
                                     205
Thr Tyr Arg Gln Asn Arg Lys Leu Leu Gln
                215
<210> 15
<211> 642
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7493507CD1
Met Val Ser Ala Ser Gln Asn Glu Val Pro Ala Ala Pro Leu Glu
Glu Leu Ala Tyr Arg Arg Ser Leu Arg Val Ala Leu Asp Val Leu
Ser Glu Gly Ser Ile Trp Ser Gln Glu Ser Ser Ala Gly Thr Gly
                                      40
                                                          45
Arg Ala Asp Arg Ser Leu Arg Gly Lys Pro Met Glu His Val Ser
                 50
Ser Pro Cys Asp Ser Asn Ser Ser Leu Pro Arg Gly Asp Val
                 65
                                      70
Leu Gly Ser Ser Arg Pro His Arg Arg Pro Cys Val Gln Gln
Ser Leu Ser Ser Ser Phe Thr Cys Glu Lys Asp Pro Glu Cys Lys
                 95
                                     100
Val Asp His Lys Lys Gly Leu Arg Lys Ser Glu Asn Pro Arg Gly
                110
                                     115
                                                         120
Pro Leu Val Leu Pro Ala Gly Gly Gly Ala Gln Asp Glu Ser Gly
                125
                                     130
                                                         135
Ser Arg Ile His His Lys Asn Trp Thr Leu Ala Ser Lys Arg Gly
                                                         150
Arg Asn Ser Ala Gln Lys Ala Ser Leu Cys Leu Asn Gly Ser Ser
                155
                                     160
Leu Ser Glu Asp Asp Thr Glu Arg Asp Met Gly Ser Lys Gly Gly
                170
                                    175
                                                         180
Ser Trp Ala Ala Pro Ser Leu Pro Ser Gly Val Arg Glu Asp Asp
                185
                                    190
                                                         195
Pro Cys Ala Asn Ala Glu Gly His Asp Pro Gly Leu Pro Leu Gly
                200
                                    205
Ser Leu Thr Ala Pro Pro Ala Pro Glu Pro Ser Ala Cys Ser Glu
                215
                                    220
Pro Gly Glu Cys Pro Ala Lys Lys Arg Pro Arg Leu Asp Gly Ser
                230
                                    235
Gln Arg Pro Pro Ala Val Gln Leu Glu Pro Met Ala Ala Gly Ala
                245
                                    250
                                                         255
Ala Pro Ser Pro Gly Pro Gly Pro Gly Pro Arg Glu Ser Val Thr
                260
                                    265
Pro Arg Ser Thr Ala Arg Leu Gly Pro Pro Pro Ser His Ala Ser
                275
                                    280
Ala Asp Ala Thr Arg Cys Leu Pro Cys Pro Asp Ser Gln Lys Leu
                290
                                    295
Glu Lys Glu Cys Gln Ser Ser Glu Glu Ser Met Gly Ser Asn Ser
                305
                                    310
Met Arg Ser Ile Leu Glu Glu Asp Glu Glu Asp Glu Glu Pro Pro
                320
                                    325
Arg Val Leu Leu Tyr His Glu Pro Arg Ser Phe Glu Val Gly Met
                335
                                    340
Leu Val Trp His Lys His Lys Lys Tyr Pro Phe Trp Pro Ala
                                                         Val
                350
                                    355
                                                         360
```

```
Val Lys Ser Val Arg Gln Arg Asp Lys Lys Ala Ser Val Leu Tyr
                                     370
                365
Ile Glu Gly His Met Asn Pro Lys Met Lys Gly Phe Thr Val Ser
                380
                                     385
                                                         390
Leu Lys Ser Leu Lys His Phe Asp Cys Lys Glu Lys Gln Thr Leu
                395
                                     400
                                                         405
Leu Asn Gln Ala Arg Glu Asp Phe Asn Gln Asp Ile Gly Trp Cys
                410
                                     415
Val Ser Leu Ile Thr Asp Tyr Arg Val Arg Leu Gly Cys Gly Ser
                425
                                     430
                                                         435
Phe Ala Gly Ser Phe Leu Glu Tyr Tyr Ala Ala Asp Ile Ser Tyr
                440
                                     445
Pro Val Arg Lys Ser Ile Gln Gln Asp Val Leu Gly Thr Lys Leu
                455
                                     460
                                                         465
Pro Gln Leu Ser Lys Gly Ser Pro Glu Glu Pro Val Val Gly Cys
                470
                                     475
Pro Leu Gly Gln Arg Gln Pro Cys Arg Lys Met Leu Pro Asp Arg
                485
                                     490
                                                         495
Ser Arg Ala Ala Arg Asp Arg Ala Asn Gln Lys Leu Val Glu Tyr
                500
                                     505
Ile Val Lys Ala Lys Gly Ala Glu Ser His Leu Arg Ala Ile Leu
                515
                                     520
Lys Ser Arg Lys Pro Ser Arg Trp Leu Gln Thr Phe Leu Ser Ser
                530
                                     535
Ser Gln Tyr Val Thr Cys Val Glu Thr Tyr Leu Glu Asp Glu Gly
                545
                                     550
Gln Leu Asp Leu Val Val Lys Tyr Leu Gln Gly Val Tyr Gln Glu
                560
                                     565
Val Gly Ala Lys Val Leu Gln Arg Thr Asn Gly Asp Arg Ile Arg
                575
                                     580
                                                         585
Phe Ile Leu Asp Val Leu Leu Pro Glu Ala Ile Ile Cys Ala Ile
                590
                                     595
Ser Ala Val Asp Glu Val Asp Tyr Lys Thr Ala Glu Glu Lys Tyr
                605
                                     610
Ile Lys Gly Pro Ser Leu Ser Tyr Arg Glu Lys Glu Ile Phe Asp
                620
                                     625
                                                         630
Asn Gln Leu Leu Glu Glu Arg Asn Arg Arg Arg
                635
                                     640
<210> 16
<211> 238
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3075994CD1
<400> 16
Met Val Leu Leu Leu Val Ala Ile Pro Leu Leu Val His Ser
Ser Arg Gly Pro Ala His Tyr Glu Met Leu Gly Arg Cys Arg Met
                 20
Val Cys Asp Pro His Gly Pro Arg Gly Pro Gly Pro Asp Gly Ala
Pro Ala Ser Val Pro Pro Phe Pro Pro Gly Ala Lys Gly Glu Val
                 50
                                      55
Gly Arg Arg Gly Lys Ala Gly Leu Arg Gly Pro Pro Gly Pro Pro
Gly Pro Arg Gly Pro Pro Gly Glu Pro Gly Arg Pro Gly Pro Pro
                 80
                                                          90
                                      85
Gly Pro Pro Gly Pro Gly Gly Val Ala Pro Ala Ala Gly
                 95
Tyr Val Pro Arg Ile Ala Phe Tyr Ala Gly Leu Arg Arg Pro His
```

115

130

Glu Gly Tyr Glu Val Leu Arg Phe Asp Asp Val Val Thr Asn Val

110

```
Gly Asn Ala Tyr Glu Ala Ala Ser Gly Lys Phe Thr Cys Pro Met
                140
Pro Gly Val Tyr Phe Phe Ala Tyr His Val Leu Met Arg Gly Gly
                155
                                     160
                                                          165
Asp Gly Thr Ser Met Trp Ala Asp Leu Met Lys Asn Gly Gln Val
                170
                                     175
                                                          180
Arg Ala Ser Ala Ile Ala Gln Asp Ala Asp Gln Asn Tyr Asp
                185
                                     190
Ala Ser Asn Ser Val Ile Leu His Leu Asp Val Gly Asp Glu Val
                200
                                     205
                                                         210
Phe Ile Lys Leu Asp Gly Gly Lys Val His Gly Gly Asn Thr Asn
                215
                                     220
                                                          225
Lys Tyr Ser Thr Phe Ser Gly Phe Ile Ile Tyr Pro Asp
                230
                                     235
<210> 17
<211> 113
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2378119CD1
<400> 17
Met Ala Ala Leu Gly Ser Pro Ser His Thr Phe Arg Gly Leu Leu
                                      10
Arg Glu Leu Arg Tyr Leu Ser Ala Ala Thr Gly Arg Pro Tyr Arg
                                      25
Asp Thr Ala Ala Tyr Arg Tyr Leu Val Lys Ala Phe Arg Ala His
Arg Val Thr Ser Glu Lys Leu Cys Arg Ala Gln His Glu Leu His
                 50
                                      55
                                                          60
Phe Gln Ala Ala Thr Tyr Leu Cys Leu Leu Arg Ser Ile Arg Lys
                 65
                                      70
His Val Ala Leu His Gln Glu Phe His Gly Lys Gly Glu Arg Ser
                 80
                                      85
Val Glu Glu Ser Ala Gly Leu Val Gly Leu Lys Leu Pro His Gln
                 95
                                     100
                                                         105
Pro Gly Gly Lys Gly Trp Glu Pro
                110
<210> 18
<211> 97
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2987418CD1
<400> 18
Met Lys Phe Arg Arg Ile Leu Ser Leu Phe Lys Ser Ala Leu Leu
Ser His Tyr Gly Met Ile Glu Gly Lys Met Lys Arg Asn Glu Arg
                                      25
                                                          30
Leu Thr Thr Phe Tyr Leu Asp His Tyr Ile Val Cys Ser Val Tyr
                                      40
                                                          45
Ser Phe Pro Ile Leu Phe His Thr Pro Gly Ile Leu Thr Met Gly
                 50
                                      55
                                                          60
Phe Lys Ala His Leu Glu Ala Thr Leu Arg Gln Gln Arg Thr Gln
                 65
Ser Pro Leu Glu Leu Leu Pro Leu Leu Leu Cys Gln Arg Ser
                 80
Thr Asn Ile Val Ala Val Lys
```

```
<210> 19
<211> 147
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4223862CD1
<400> 19
Met Val Cys Val Leu His Arg Asp Arg Thr Thr Val Ser Ala Thr
Ala Leu Arg Phe Ser Lys Leu Gly Gly Gly Val Leu Leu Leu Phe
                 20
Val Ser Ala Ala His Gly Cys Thr Asp Val Gly Asn Arg Glu Val
Phe Gly Gln Gly Asp Gly Ser Ala Gly Phe Pro Val Leu Ser Ser
                 50
                                      55
Phe Pro Phe Leu Glu Val Leu Ser Phe Arg Gly Phe Glu Ser Cys
                 65
Asn Lys Arg Ser Ser Leu Ile Asn Phe Gly Leu Phe Pro Leu Asn
                 80
                                      85
                                                          90
Val Arg His Leu Ile Leu Asn Phe Phe Leu Val Leu Leu Leu
                 95
                                     100
Pro Gly Tyr Phe Val Pro Ser Pro Trp Leu Leu Gly Ser Cys Phe
                110
                                     115
Gln Tyr Ser Ala Ser Cys Phe Pro Phe Ser Trp Asp Pro Ala Leu
                125
                                     130
Ala His Ala Leu Tyr Leu Gly Pro Met Cys Val Asn
                140
                                     145
<210> 20
<211> 95
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6046406CD1
<400> 20
Met Pro Gln Arg Leu Trp Val Gly Ala Gly Leu Val Pro Thr Ile
Ala Leu Cys Cys Ser Glu Ala Arg Ala Val Cys Pro Ser Pro Gly
Trp Ile Pro Glu Ser Gly Met Thr Gln Ser Pro Val Pro Lys Ser
Ser Arg Gly His Arg His Ile Pro Val His Arg Gly Gly Lys Thr
                 50
                                      55
His Ala Cys Pro Met Gly Gly Trp Gly Ser Asp Leu His Lys Asp
                 65
                                     70
Arg Trp Met Phe Gly Arg Ser Arg Leu Gly Ser Gly Val Arg Ser
                 80
                                     85
Ser Pro Pro Glu Val
<210> 21
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6743529CD1
Met Lys Phe Gln Leu Gly Leu Ser Ala Val Lys Ser Val Ser Gln
```

```
10
Ser Val Phe Cys Gly Thr Ser Thr Tyr Cys Val Leu Asn Thr Val
Pro Pro Ile Glu Asp Asp His Gly Asn Ser Asn Ser Ser His Val
                                       40
                                                           45
Lys Ile Phe Leu Pro Lys Lys Leu Leu Glu Cys Leu Pro Lys Cys
                  50
                                      55
                                                           60
Ser Ser Leu Pro Lys Glu Arg His Arg Trp Asn Thr Asn Glu Arg
Ser
<210> 22
<211> 154
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7283809CD1
<400> 22
Met Met Gly Leu Leu His Leu Ala Leu Leu Ala Leu Ala Pro Leu
Pro Phe Leu Ser Phe Phe Gly Cys Ser His Ser Val Cys Cys Phe
                  20
                                      25
Gly Leu Leu Phe Ser Phe Pro Pro Gln Ala Phe Val Phe Pro Arg
                  35
Ala Pro Ser Trp Ala Leu Phe Phe Gln Leu Ile Leu Ser Ile Ser
                  50
Val Ile Phe Val Asn Pro Pro His Ile Cys Pro Ser Gly Pro Ala
Ser Pro Glu Met His Leu His Ile Ser Ser Cys Leu Leu Val Ile
                  80
                                      85
Ala Pro Trp Gly Thr Leu Asn Pro Ser Cys Val Pro Leu Thr His
                  95
                                     100
                                                          105
Pro Pro His Cys Pro His Gly Asp Arg Leu Leu His Cys Leu Ser
                 110
                                     115
                                                          120
Ser Pro Pro Thr Phe Ser Trp Ser Tyr Ser Ala Asp Gly Phe Gly
                 125
                                     130
                                                          135
Ser Glu Thr Ser Pro Pro Phe Leu Gln Pro Pro Arg Pro Leu Pro
                                     145
Thr Cys Pro Gly
<210> 23
<211> 160
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7637563CD1
<400> 23
Met Arg Val Pro Trp Gly Pro Pro Asp Ala Gly Leu Gly Leu Tyr
                                      10
Phe Cys Gly Pro Arg Ala Leu Trp Gly Leu Gly Pro Thr Gln Leu
                                      25
His Thr Ser Leu Trp Gly Gln Asp Val Val Leu Glu Met Pro Lys
                  35
                                      40
Met Gly Pro Thr Gly Arg Asn Cys Ala Lys Gly Arg Leu Ala Ser
                                                          60
Thr Arg Arg Phe Leu Gln Leu His Thr Gln Pro Arg Asp Phe Lys
                  65
                                      70
```

Glu His Phe Ser Gly Lys Asn Thr His Ser Lys Asn Leu Arg Phe

```
Leu Thr Pro Pro Val Cys Thr Trp Met Cys Asp Tyr Phe Arg Pro
                                     100
Val Ser Leu Gln Gln Asn Ile Leu His Asp Ser Cys Pro Ala Pro
                110
                                     115
                                                          120
Arg Tyr Leu Val Leu Asp Leu Gly Gly Gly Arg Ser Cys Leu Lys
                125
                                     130
                                                         135
Thr Asn Lys Gln Thr Asn Lys Ile His Gln Lys Gln Lys Asn Arg
                140
                                     145
Asn Asn Arg Asn Asn Cys Gly Gly Trp Gln
                155
<210> 24
<211> 72
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7663814CD1
<400> 24
Met Leu Ser Pro Cys Pro Leu Gln Leu Ala Ala Pro Leu Leu Leu
Cys Gln Ser Ser Leu Pro Glu Pro Ser Thr Thr Ile Gly Lys Thr
                 20
                                      25
                                                          30
His His Pro His Met Lys Gln Leu Thr Gly Asn Asn Ser Met Tyr
                 35
                                      40
His Thr Val His Ser Leu Arg Val Thr Asn Tyr Thr His Thr Ser
                 50
                                      55
Pro Phe Gln Asn Asn Ala Asp Thr Ile Phe Cys Gly
                 65
<210> 25
<211> 270
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 8001939CD1
<400> 25
Met Glu Asn Gln Pro Val Arg Trp Arg Ala Leu Pro Gly Leu Pro
                                     10
Arg Pro Pro Gly Leu Pro Ala Ala Pro Trp Leu Leu Gly Val
                                                          30
Leu Leu Pro Gly Thr Leu Arg Leu Ala Gly Gly Gln Ser Val
                                      40
Thr His Thr Gly Leu Pro Ile Met Ala Ser Leu Ala Asn Thr Ala
                 50
                                     55
Ile Ser Phe Ser Cys Arg Ile Thr Tyr Pro Tyr Thr Pro Gln Phe
                 65
                                     70
Lys Val Phe Thr Val Ser Tyr Phe His Glu Asp Leu Gln Gly Gln
                 80
Arg Ser Pro Lys Lys Pro Thr Asn Cys His Pro Gly Leu Gly Thr
                 95
                                    100
Glu Asn Gln Ser His Thr Leu Asp Cys Gln Val Thr Leu Val Leu
                110
                                    115
                                                         120
Pro Gly Ala Ser Ala Thr Gly Thr Tyr Tyr Cys Ser Val His Trp
                125
                                    130
                                                         135
Pro His Ser Thr Val Arg Gly Ser Gly Thr Phe Ile Leu Val Arg
                140
                                    145
                                                         150
Asp Ala Gly Tyr Arg Glu Pro Pro Gln Ser Pro Gln Lys Leu Leu
                155
                                    160
                                                         165
Leu Phe Gly Phe Thr Gly Leu Leu Ser Val Leu Ser Val Val Gly
                170
                                    175
Thr Ala Leu Leu Trp Asn Lys Lys Arg Met Arg Gly Pro Gly
```

```
185
                                     190
Lys Asp Pro Thr Arg Lys Cys Pro Asp Pro Arg Ser Ala Ser Ser
                200
                                     205
                                                          210
Pro Lys Gln His Pro Ser Glu Ser Val Tyr Thr Ala Leu Gln Arg
                215
                                     220
                                                          225
Arg Glu Thr Glu Val Tyr Ala Cys Ile Glu Asn Glu Asp Gly Ser
                230
                                     235
Ser Pro Thr Ala Lys Gln Ser Pro Leu Ser Gln Glu Arg Pro His
                245
                                     250
                                                          255
Arg Phe Glu Asp Asp Gly Glu Leu Asn Leu Val Tyr Glu Asn Leu
                260
                                     265
<210> 26
<211> 121
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 8191019CD1
<400> 26
Met Phe His Ser Val Ala Leu Ala Leu Ser Val Cys Ile Cys Arg
                                      10
Val Gly Pro Asp Thr Pro Leu Ser Pro Gln Arg Gly Leu Ala Leu
                 20
Ala Arg Val Pro Ala Asn Met Gln Glu Ala Glu Asn Leu Gly Arg
                                      40
Lys Phe Gln Pro Val Ala Ile His Ser His Leu Gly Gly Pro Ala
Ser Lys Gly Ser Leu Glu Ala Thr Trp Ala Arg Ala Gly Arg Gly
                 65
                                      70
Cys Arg Ile Ser Arg Pro Ala Lys Val Ser Ala Thr Leu Leu Gly
                 80
                                      85
Gly Pro Arg Leu Gln Val Pro Val Val Val Pro Thr Ser Trp Ser
                 95
                                     100
                                                         105
Phe Cys Ser Ala Ser Ile Ser Pro Ser Leu Pro Val Val Leu Ala
                110
                                     115
Pro
<210> 27
<211> 181
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 919788CD1
<400> 27
Met Arg Met Arg Pro Leu Ala Gly Gly Gly Lys Ser Trp Gly
Ile Ala His Phe Tyr Lys Pro Leu Gln Arg Glu Arg Arg Ala Gly
                 20
                                      25
Ala Glu Cys Gly Leu Ala Arg Gln Val Arg Ala Glu Val Thr Lys
                 35
Trp Ile Gly Val Asn Arg Arg Pro Arg Lys Arg Lys Arg Glu
                 50
                                      55
                                                          60
Lys Glu Glu Val Phe Glu Lys Leu Leu Pro Asp Gln Leu Val Leu
                 65
                                      70
Leu Leu Glu His Leu Leu Glu Gln Lys Thr Leu Ser Pro Arg Thr
                 80
                                     85
                                                          90
Leu Gln Ser Leu Gln Arg Thr Tyr His Leu Gln Asp Gln Asp Ala
                 95
                                    100
Glu Val Arg His Arg Trp Cys Glu Leu Ile Val Lys His Lys Phe
```

```
110
                                     115
Thr Lys Ala Tyr Lys Ser Val Glu Arg Phe Leu Gln Glu Asp Gln
                125
                                     130
Ala Met Gly Val Tyr Leu Tyr Gly Glu Leu Met Val Ser Glu Asp
                140
                                     145
                                                         150
Ala Arg Gln Gln Leu Ala Arg Arg Cys Phe Glu Arg Thr Lys
                155
                                     160
                                                         165
Glu Gln Met Asp Arg Ser Ser Ala Gln Val Val Ala Glu Met Leu
                170
                                     175
Phe
<210> 28
<211> 120
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4758058CD1
<400> 28
Met Ser Ser Leu Gln Ala Met Lys Thr Leu Ser Leu Val Leu Leu
Val Ala Leu Ala Leu Ser Pro Gln Pro Gln Gly Leu Arg Cys Tyr
                 20
                                      25
Arg Cys Leu Ala Val Leu Glu Gly Ala Ser Cys Ser Val Val Ser
                 35
                                      40
Cys Pro Phe Leu Asp Gly Val Cys Val Ser Gln Lys Val Ser Val
                 50
                                      55
Phe Gly Ser Glu Ser Trp Gly Ala Arg Ala Glu Gly Arg Leu Ser
                 65
                                      70
Ala Val Val Asp Ser Gln Ile Ser Cys Cys Lys Gly Asp Leu Cys
                 80
                                      85
Asn Ala Val Val Leu Ala Ala Gly Ser Pro Trp Ala Leu Cys Val
                 95
                                    100
                                                         105
Gln Leu Leu Ser Leu Gly Ser Val Phe Leu Trp Ala Leu Leu
                110
                                    115
<210> 29
<211> 129
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499835CD1
<400> 29
Met Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu
                                     10
Ser Cys Leu Ile Leu Leu Cys Gln Val Gln Gly Glu Glu Thr Gln
                                     25
                                                          30
Lys Glu Leu Pro Ser Pro Arg Ile Ser Cys Pro Lys Gly Ser Lys
                 35
                                     40
Ala Tyr Gly Ser Pro Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser
                 50
                                     55
Trp Met Asp Ala Asp Gly Ser Glu Pro Asp Gly Asp Gly Trp Glu
                 65
                                     70
Trp Ser Ser Thr Asp Val Met Asn Tyr Phe Ala Trp Glu Lys Asn
                 80
                                     85
Pro Ser Thr Ile Leu Asn Pro Gly His Cys Gly Ser Leu Ser Arg
                 95
                                    100
                                                        105
Ser Thr Gly Phe Leu Lys Trp Lys Asp Tyr Asn Cys Asp Ala Lys
                110
                                    115
Leu Pro Tyr Val Cys Lys Phe Lys Asp
```

```
<210> 30
<211> 101
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2484647CD1
Met Glu Arg Thr Leu Ile Pro Ala Pro Thr Leu Ala Ser Leu Cys
Gln Ala Gln Ala Glu Pro Arg Cys Cys Leu Cys Leu Ser Ala Val
                                                           30
Ala Asp Glu Ala Cys Ala Glu His Phe Gly Lys Ser Gly Glu Leu
                 35
                                      40
Lys Ala Gln Ala Leu Gly Pro Ile Thr Ala Met Gln Ala Gln Arg
                 50
                                      55
Trp Gln Ala Gly Ala His Arg Trp Ile Cys Gln Cys Gln Ser Gln
                 65
                                      70
Ser Gly Pro Gln Lys Cys Ser Gly Val Asp Ser His Cys Leu Thr
                 80
                                      85
Phe Pro Ser Met Ala Cys Met Arg Asn Gly Arg
                 95
                                     100
<210> 31
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2587034CD1
<400> 31
Met Gly Phe Phe Asn Tyr Leu Thr Tyr Phe Leu Ala Ala Gly Ala
                                      10
Val Thr Leu Gly Ile Gly Phe Phe Ala Leu Ala Ser Ala Leu Trp
                 20
                                      25
                                                           30
Phe Leu Ile Cys Lys Arg Arg Glu Ile Phe Gln Asn Ser Lys Phe
                 35
                                      40
                                                           45
Lys Ala Ile Asp Glu Arg Cys Arg Gln Arg Pro Ser Met Ala Lys
                 50
                                      55
                                                           60
Ile Lys Ser His Ser Gln Cys Val Phe Ile Ser Arg Asn Phe His
                 65
Thr Gly Arg Phe Gln Leu Gln Phe
<210> 32
<211> 172
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2702991CD1
<400> 32
Met Arg Leu Leu Gly Pro Arg Phe Gln Gly Gly Trp Gly Thr His
                                      10
                                                          15
Arg Leu Met Pro Arg Gly Val Val Gly Ala Ala Ala Ser Gln Cys
                 20
                                      25
                                                           30
Ala Val Val Arg Ala Gly Lys Ala Trp Gly Leu Gly Ser Arg Pro
                 35
                                      40
```

Leu Gly Lys Val Glu Met Glu Asp Pro Asp Ile Leu Thr Ser Pro

```
50
                                      55
Gly Lys Leu Pro His Glu Pro Ala Pro Pro Val Gln Val Cys Glu
                 65
Leu His Phe Ser Arg Pro Arg Pro Ala Gln Glu Ala Ser Ala Phe
                 80
Pro Phe Leu Val Pro Asp Ser Val Ser Gln Met Ala Arg Gly Gly
                                     100
Pro Gly Lys Ala Trp Gly Gly Gly Val Leu Glu Glu Gly Pro Gly
                110
                                     115
                                                          120
Glu Gly Ser Thr Gln Asn Trp Pro Cys Gly Phe Leu Gln Pro Gly
                125
                                     130
                                                          135
Leu Leu Gly Trp Arg Gly Asn Ser Lys Glu Pro Arg Val Leu Pro
                140
                                     145
                                                          150
Phe Asn Asn Gln Cys Gly Ala Gly Leu Trp Arg Arg Pro Ala Gly
                155
                                   160
Arg Gln Arg Glu Leu Gly Thr
                170
<210> 33
<211> 168
<212> PRT
<213> Homo sapiens
<220>
<221> misc feature
<223> Incyte ID No: 2744736CD1
<400> 33
Met Cys Val Gly Val Cys Gly Ala Tyr Thr Thr Cys Leu Leu Gln
Trp Cys Val Ser Glu Val Pro Pro Met Arg Val Pro Pro Leu Ser
Leu Leu Trp Val Gly Ser Gln Leu Pro Ala Ala Arg Pro Pro Leu
                 35
                                      40
                                                          45
Gly Pro Cys Gly Cys Val Gln Ala Ser Ala Ala Ala Pro His Arg
                 50
                                      55
Leu Pro Gly Pro Phe Leu Cys Thr Thr Thr Ala Ala Leu Arg Pro
                 65
                                      70
Val Gln Val Trp Ala Gly Gln Pro Arg Gly Gly Asn Pro Ala Gln
                                      85
Glu Gly Cys Gly His Val Asp Gly Ser Ser Leu Arg Trp Cys Gly
                 95
                                     100
                                                         105
Leu Gly Pro Gly Ser His Gly Gly Lys Lys Trp Pro Pro Pro Leu
                110
                                     115
                                                         120
Pro Pro Arg Trp Pro Arg Gly Trp Pro Pro Ser Gln Ala Val Ala
                125
                                     130
                                                         135
Gln Val Arg Leu Pro Arg Glu Asp Arg Arg Cys Ser Gly Pro Ser
                140
                                     145
                                                         150
Leu Ser Leu Thr Ala Ala Ser Trp Leu Thr Thr Gly Ser Gly Val
                155
                                                         165
Ser Cys Tyr
<210> 34
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2915475CD1
<400> 34
Met Leu Pro Leu Tyr Val Pro Leu Leu Leu Thr Leu Leu Gly Val
                                      10
Ser Asn Ala Gln Glu Leu Thr Pro Val Ser Gly Leu Cys Cys Phe
                 20
                                      25
```

```
Ser Phe Phe Val Ser Gly Thr Gly Cys Asp Ser Val Thr Gln Ala
                 35
Gly Val His Leu Leu Phe Leu Val Ser Val Met Phe Phe Phe Leu
                                      55
                  50
Leu Ser Leu Phe Leu Ile Leu Phe Leu Leu Phe Thr Tyr Leu Leu
                 65
Glu Thr Gly Ser His Ser Val Thr
                 80
<210> 35
<211> 167
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3040427CD1
<400> 35
Met Val Gln His Cys Pro Pro Arg Thr Glu Ala Ala Pro Cys Glu
                                      10
Gly Cys Leu Lys Ile Leu Met Thr Met Arg Ser Leu Leu Arg Thr
                 20
                                                           30
Pro Phe Leu Cys Gly Leu Leu Trp Ala Phe Cys Ala Pro Gly Ala
                                      40
Arg Ala Glu Glu Pro Ala Ala Ser Phe Ser Gln Pro Gly Ser Met
                                      55
                  50
Gly Leu Asp Lys Asn Thr Val His Asp Gln Glu His Ile Met Glu
                                      70
                  65
His Leu Glu Gly Val Ile Asn Lys Pro Glu Ala Glu Met Ser Pro
                                                          90
                 80
                                      85
Gln Glu Leu Gln Leu His Tyr Phe Lys Met His Asp Tyr Asp Gly
                  95
                                     100
Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala Ile Thr His
                110
                                     115
                                                         120
Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu Met Ser Glu
                125
                                     130
                                                         135
Asp Glu Leu Ile Asn Ile Ile Asp Gly Val Leu Arg Asp Asp Asp
                140
                                     145
                                                         150
Lys Asn Asn Asp Gly Tyr Ile Asp Tyr Ala Glu Phe Ala Lys Ser
                155
                                     160
                                                          165
Leu Gln
<210> 36
<211> 195
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499722CD1
<400> 36
Met Gly Phe Phe Asn Tyr Leu Thr Tyr Phe Leu Ala Ala Gly Ala
Val Thr Leu Gly Ile Gly Phe Phe Ala Leu Ala Ser Ala Leu Trp
                  20
                                      25
Phe Leu Ile Cys Lys Arg Arg Glu Ile Phe Gln Asn Ser Lys Phe
                                      40
Lys Ala Ile Asp Glu Arg Cys Arg Gln Arg Pro Ser Met Ala Lys
                  50
                                      55
                                                          60
Ile Lys Ser His Ser Gln Cys Val Phe Ile Ser Arg Asn Phe His
```

Thr Gly Arg Phe Gln Leu Gln Glu Glu Gln Arg Lys Lys Glu Ala

Ala His Ile Lys Ala Ile Lys Asp His Ser Lys Asp Glu Pro Gln

```
100
Leu Ala Thr Lys Asn Ile Ile Cys Asp Pro Ser Glu Thr Ser Ser
                110
                                     115
                                                          120
Thr Thr Asn Arg Ser Ser Val Thr Leu Ser Leu Ser Thr Leu Pro
                125
                                     130
                                                          135
Ser Asp Ser Tyr Tyr Ser Gln Ser Ile Glu Ala Ala Asp Asp Trp
                140
                                     145
                                                          150
Phe Ser Asp Asp Ser Leu Val Lys Arg Asn Ser Pro Met Pro Ser
                155
                                     160
                                                          165
Leu Gly Glu Pro Leu Met Glu Lys Val Phe Ser Tyr Leu Ser
                                                         Thr
                170
                                     175
Ile Ser Leu Glu Glu Gly Thr Glu Ser Val Leu Asn Asp Thr Leu
                185
                                     190
<210> 37
<211> 89
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6776909CD1
<400> 37
Met Val Pro Lys Pro Arg Cys Val Leu Gly Trp Thr Pro Thr Pro
                                      10
Leu Asn Leu Val Leu Trp Pro Gly Arg Ala Ser Gly His Ala Pro
                                      25
                                                          30
Cys Ser Cys Pro Trp Leu Pro Ala Ala Trp Arg Arg Gly Ala Val
                                      40
Lys Gln Leu Phe His Ser Ala Gly Arg Gln Ala Thr Pro Gly Leu
                 50
                                      55
Val Ile Pro Val Pro His Cys Ser Trp Asn Ser Asp Ala Asp Leu
                 65
                                      70
Thr Ala Ala Gly Arg Arg Gly Val Ser Gly His Arg Lys Asp
<210> 38
<211> 136
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7280438CD1
<400> 38
Met Arg Ser Val Ala Leu Pro Ala Val Ala Gly Ala Gly Val Gly
Ala Glu Gly Ala Gly Lys Ala Ala Val Pro Ala Phe Pro Pro Ser
                 20
Thr Phe Ser Arg Ser Gly Pro Ala Pro Gly Pro Arg Pro Gln Leu
Pro Gly Gly Val Gln Ser Ser Gln Asp Cys Pro Ser Arg Val Val
                 50
                                      55
Pro Val Val Asp Pro Pro Pro Arg Pro Arg Gly Gly Gly Trp Pro
                 65
                                      70
Val Trp Trp Trp Pro Leu Asn Pro Gly Trp Arg Gly Leu Arg Arg
                 80
                                     85
                                                          90
Trp Gln Trp Gly Asp His Lys Gly Phe Arg Gly Val Ser Trp Gly
                                    100
                                                         105
Tyr Ser Val Cys Gly Trp Ser Leu Ser Ser Cys Arg Trp Val Glu
                110
                                    115
                                                         120
Arg Thr Glu Glu Gly Pro Gln Gly Ala Glu His Pro Pro Ala Pro
                125
Ser
```

```
<211> 420
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499809CD1
<400> 39
Met Trp Leu Pro Leu Val Leu Leu Ala Val Leu Leu Ala
Val Leu Cys Lys Val Tyr Leu Gly Leu Phe Ser Gly Ser Ser Pro
                  20
Asn Pro Phe Ser Glu Asp Val Lys Arg Pro Pro Ala Pro Leu Val
                 35
                                      40
                                                          45
Thr Asp Lys Glu Ala Arg Lys Lys Val Leu Lys Gln Gly Ile His
                  50
                                      55
Tyr Ile Gly Arg Met Glu Glu Gly Ser Ile Gly Arg Phe Ile Leu
                 65
                                      70
Asp Gln Ile Thr Glu Gly Gln Leu Asp Trp Ala Pro Leu Ser Ser
                 80
                                      85
Pro Phe Asp Ile Met Val Leu Glu Gly Pro Asn Gly Arg Lys Glu
                 95
                                     100
                                                         105
Tyr Pro Met Tyr Ser Gly Glu Lys Ala Tyr Ile Gln Gly Leu Lys
                110
                                     115
                                                         120
Glu Lys Phe Pro Gln Glu Glu Ala Ile Ile Asp Lys Tyr Ile Lys
                125
                                     130
                                                         135
Leu Val Lys Val Val Ser Ser Gly Ala Pro His Ala Ile Leu Leu
                140
                                     145
Lys Phe Leu Pro Leu Pro Val Val Gln Leu Leu Asp Arg Cys Gly
                155
                                     160
Leu Leu Thr Arg Phe Ser Pro Phe Leu Gln Ala Ser Thr Gln Ser
                170
                                     175
Leu Ala Glu Val Leu Gln Gln Leu Gly Ala Ser Ser Glu Leu Gln
                185
                                     190
                                                         195
Ala Val Leu Ser Tyr Ile Phe Pro Thr Tyr Gly Val Thr Pro Asn
                200
                                     205
                                                         210
His Ser Ala Phe Ser Met His Ala Leu Leu Val Asn His Tyr Met
                215
                                     220
                                                         225
Lys Gly Gly Phe Tyr Pro Arg Gly Gly Ser Ser Glu Ile Ala Phe
                230
                                     235
                                                         240
His Thr Ile Pro Val Ile Gln Arg Ala Gly Gly Ala Val Leu Thr
                245
                                     250
Lys Ala Thr Val Gln Ser Val Leu Leu Asp Ser Ala Gly Lys Ala
                260
                                     265
Cys Gly Val Ser Val Lys Lys Gly His Glu Leu Val Asn Ile Tyr
                275
                                     280
Cys Pro Ile Val Val Ser Asn Ala Gly Leu Phe Asn Thr Tyr Glu
                290
                                     295
His Leu Leu Pro Gly Asn Ala Arg Cys Leu Pro Gly Val Lys Gln
                305
                                     310
Gln Leu Gly Thr Val Arg Pro Gly Leu Gly Met Thr Ser Val Phe
                320
                                     325
Ile Cys Leu Arg Gly Thr Lys Glu Asp Leu His Leu Pro Ser Thr
                335
                                     340
Asn Tyr Tyr Val Tyr Tyr Asp Thr Asp Met Asp Gln Ala Met Glu
                350
                                     355
Arg Tyr Val Ser Met Pro Arg Glu Glu Ala Ala Glu His Ile Pro
                                     370
Leu Leu Phe Phe Ala Phe Pro Ser Ala Lys Asp Pro Thr Trp Glu
                380
                                     385
Asp Arg Phe Pro Gly Gly Glu Cys Asp Cys Arg Ile Pro Thr His
                395
                                     400
Gln Pro Val Leu Ser Gly Cys Ser Pro Arg Cys Leu Leu Arg Gly
```

<210> 39

<210> 40

```
<211> .667
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499921CD1
<400> 40
Met Asp Pro Ser Ala Asp Thr Trp Asp Leu Phe Ser Pro Leu Ile
Ser Leu Trp Ile Asn Arg Phe Tyr Ile Tyr Leu Gly Phe Ala Val
                  20
Ser Ile Ser Leu Trp Ile Cys Val Gln Ile Val Ile Lys Thr Gln
                  35
Gly Lys Asn Leu Gln Glu Lys Ser Val Pro Lys Ala Ala Gln Asp
                  50
                                      55
Leu Met Thr Asn Gly Tyr Val Ser Leu Gln Glu Lys Asp Ile Phe
                  65
Val Ser Gly Val Lys Ile Phe Tyr Gly Ser Gln Thr Gly Thr Ala
                  80
                                      85
Lys Gly Phe Ala Thr Val Leu Ala Glu Ala Val Thr Ser Leu Asp
                  95
                                     100
Leu Pro Val Ala Ile Ile Asn Leu Lys Glu Tyr Asp Pro Asp Asp
                110
                                     115
His Leu Ile Glu Glu Val Gly Lys Asn Val Asp Lys Trp Leu Trp
                125
                                     130
Met Leu Gly Ala His Arg Val Met Ser Arg Gly Glu Gly Asp Cys
                140
                                     145
                                                          150
Asp Val Val Lys Ser Lys His Gly Ser Ile Glu Ala Asp Phe Arg
                155
                                     160
Ala Trp Lys Thr Lys Phe Ile Ser Gln Leu Gln Ala Leu Gln Lys
                170
                                     175
Gly Glu Arg Lys Lys Ser Cys Gly Gly His Cys Lys Lys Gly Lys
                185
                                     190
Cys Glu Ser His Gln His Gly Ser Glu Glu Arg Glu Glu Gly Ser
                200
                                     205
                                                          210
His Glu Gln Asp Glu Leu His His Arg Asp Thr Glu Glu Glu Glu
                215
                                     220
Pro Phe Glu Ser Ser Ser Glu Glu Glu Phe Gly Glu Asp His
                230
                                     235
                                                          240
Gln Ser Leu Asn Ser Ile Val Asp Val Glu Asp Leu Gly Lys Ile
                245
                                     250
Met Asp His Val Lys Lys Glu Lys Arg Glu Lys Glu Gln Glu
                260
                                     265
                                                          270
Glu Lys Ser Gly Leu Phe Arg Asn Met Gly Arg Asn Glu Asp Gly
                275
                                     280
                                                         285
Glu Arg Arg Ala Met Ile Thr Pro Ala Leu Arg Glu Ala Leu Thr
                290
                                     295
                                                         300
Lys Gln Gly Tyr Gln Leu Ile Gly Ser His Ser Gly Val Lys Leu
                305
                                    310
                                                          315
Cys Arg Trp Thr Lys Ser Met Leu Arg Gly Arg Gly Gly Cys Tyr
                320
                                     325
                                                         330
Lys His Thr Phe Tyr Gly Ile Glu Ser His Arg Cys Met Glu Thr
                335
                                    340
Thr Pro Ser Leu Ala Cys Ala Asn Lys Cys Val Phe Cys Trp Arg
                350
                                    355
                                                         360
His His Thr Asn Pro Val Gly Thr Glu Trp Arg Trp Lys Met Asp
                365
                                    370
Gln Pro Glu Met Ile Leu Lys Glu Ala Ile Glu Asn His Gln Asn
                380
                                    385
Met Ile Lys Gln Phe Lys Gly Val Pro Gly Val Lys Ala Glu Arg
                395
                                     400
                                                         405
```

<221> misc_feature

```
Phe Glu Glu Gly Met Thr Val Lys His Cys Ala Leu Ser Leu Val
Gly Glu Pro Ile Met Tyr Pro Glu Ile Asn Arg Phe Leu Lys Leu
                425
                                     430
Leu His Gln Cys Lys Ile Ser Ser Phe Leu Val Thr Asn Ala Gln
                440
                                     445
Phe Pro Ala Glu Ile Arg Asn Leu Glu Pro Val Thr Gln Leu Tyr
                455
                                     460
Val Ser Val Asp Ala Ser Thr Lys Asp Ser Leu Lys Lys Ile Asp
                470
                                     475
Arg Pro Leu Phe Lys Asp Phe Trp Gln Arg Phe Leu Asp Ser Leu
                485
                                     490
Lys Ala Leu Ala Val Lys Gln Gln Arg Thr Val Tyr Arg Leu Thr
                500
                                     505
                                                         510
Leu Val Lys Ala Trp Asn Val Asp Glu Leu Gln Ala Tyr Ala Gln
                515
                                     520
Leu Val Ser Leu Gly Asn Pro Asp Phe Ile Glu Val Lys Gly Val
                530
                                     535
                                                         540
Thr Tyr Cys Gly Glu Ser Ser Ala Ser Ser Leu Thr Met Ala His
                545
                                     550
Val Pro Trp His Glu Glu Val Val Gln Phe Val His Glu Leu Val
                560
                                     565
Asp Leu Ile Pro Glu Tyr Glu Ile Ala Cys Glu His Glu His Ser
                575
                                     580
Asn Cys Leu Leu Ile Ala His Arg Lys Phe Lys Ile Gly Glu
                590
                                     595
Trp Trp Thr Trp Ile Asp Tyr Asn Arg Phe Gln Glu Leu Ile Gln
                605
                                     610
                                                         615
Glu Tyr Glu Asp Ser Gly Gly Ser Lys Thr Phe Ser Ala Lys Asp
                620
                                     625
                                                         630
Tyr Met Ala Arg Thr Pro His Trp Ala Leu Phe Gly Ala Ser Glu
                635
                                     640
Arg Gly Phe Asp Pro Lys Asp Thr Arg His Gln Arg Lys Asn Lys
                650
                                     655
                                                         660
Ser Lys Ala Ile Ser Gly Cys
                665
<210> 41
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2705858CD1
<400> 41
Met Ala Leu Phe Ser Ser Phe Phe Thr Leu Ser Val Leu His Leu
                                      10
Cys Thr Ser Gln Thr Ile Met Ala Gln Arg Gln Val Met Ser Pro
                 20
                                      25
Pro Thr Leu Trp Leu His Ser Cys Asp Tyr Val Met His Gly Ile
                 35
                                      40
Val Arg Leu Cys Ser Asn Pro Thr Val Ser Tyr Cys Ala Gly Cys
                 50
                                      55
Val Pro Gln Pro Ile Leu Asp Cys Ser Thr Ala Ile Val Leu Thr
                 65
                                      70
Ile Thr Tyr Cys Lys Asp Ser Met
                 80
<210> 42
<211> 80
<212> PRT
<213> Homo sapiens
<220>
```

<223> Incyte ID No: 3069892CD1 <400> 42 Met Asn Thr Gly Trp Ser Ser Asn Lys Gly Phe Pro Cys Ile Leu Cys Leu Pro Ala Met Gly Ala Gln Ala Gln Val Leu Pro Pro Leu 20 Tyr Cys Tyr Trp Phe Val Thr Ile Leu Leu Ala Arg Met Val Val 35 40 Ser Ser Arg Glu Glu Ala Thr Glu Phe Pro Thr Arg Glu Thr Gly 50 55 60 Leu Ser Arg His Asp Leu His Thr Leu Ala Gln Thr Pro Glu Asp 65 Thr Asp Leu Gly Pro <210> 43 <211> 367 <212> PRT <213> Homo sapiens <220> <221> misc_feature <223> Incyte ID No: 3069586CD1 <400> 43 Met Val Leu Ile Gln Glu Met Ala Leu Lys Ile Asp Gln Gly Phe 10 Leu Gly Ala Ile Ile Ala Leu Phe Thr Pro Thr Thr Asp Pro Glu 20 25 30 Ala Glu Arg Arg Arg Thr Lys Leu Ile Gln Gln Asp Ile Asp Ala 35 Leu Asn Ala Glu Leu Met Glu Thr Ser Met Thr Asp Met Ser Ile 50 55 60 Leu Ser Phe Phe Glu His Phe His Ile Ser Pro Val Lys Leu His 65 70 Leu Ser Leu Ser Leu Gly Ser Gly Glu Glu Ser Asp Lys Glu 80 85 90 Lys Gln Glu Met Phe Ala Val His Ser Val Asn Leu Leu Lys 95 100 105 Ser Ile Gly Ala Thr Leu Thr Asp Val Asp Asp Leu Ile Phe Lys 110 115 120 Leu Ala Tyr Tyr Glu Ile Arg Tyr Gln Phe Tyr Lys Arg Asp Gln 125 130 135 Leu Ile Trp Ser Val Val Arg His Tyr Ser Glu Gln Phe Leu Lys 140 145 150 Gln Met Tyr Val Leu Val Leu Gly Leu Asp Val Leu Gly Asn Pro 155 160 Phe Gly Leu Ile Arg Gly Leu Ser Glu Gly Val Glu Ala Leu Phe 170 175 180 Tyr Glu Pro Phe Gln Gly Ala Val Gln Gly Pro Glu Glu Phe Ala 185 190 195 Glu Gly Leu Val Ile Gly Val Arg Ser Leu Phe Gly His Thr Val 200 210 Gly Gly Ala Ala Gly Val Val Ser Arg Ile Thr Gly Ser Val Gly 215 220 225 Lys Gly Leu Ala Ala Ile Thr Met Asp Lys Glu Tyr Gln Gln Lys 230 235 240 Arg Arg Glu Glu Leu Ser Arg Gln Pro Arg Asp Phe Gly Asp Ser 245 250 255 Leu Ala Arg Gly Gly Lys Gly Phe Leu Arg Gly Val Val Gly Gly 270 265 Val Thr Gly Ile Ile Thr Lys Pro Val Glu Gly Ala Lys Lys Glu

280

295

Gly Ala Ala Gly Phe Phe Lys Gly Ile Gly Lys Gly Leu Val Gly

Ala Val Ala Arg Pro Thr Gly Gly Ile Val Asp Met Ala Ser Ser

285

275

```
Thr Phe Gln Gly Ile Gln Arg Ala Ala Glu Ser Thr Glu Glu Val
                320
                                     325
                                                         330
Ser Ser Leu Arg Pro Pro Arg Leu Ile His Glu Asp Gly Ile
                335
                                     340
                                                         345
Arg Pro Tyr Asp Arg Gln Glu Ser Glu Gly Ser Asp Leu Leu Glu
                350
                                     355
                                                         360
Gln Glu Leu Glu Ile Gln Glu
                365
<210> 44
<211> 154
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500104CD1
<400> 44
Met Leu Leu Ile Leu Leu Ser Val Ala Leu Leu Ala Phe Ser Ser
                                                          15
Ala Gln Asp Leu Asn Glu Asp Gly Gly Asp Ser Glu Gln Phe Ile
                 20
                                      25
Asp Glu Glu Arg Gln Gly Pro Pro Leu Gly Gly Gln Gln Ser Gln
                 35
                                      40
                                                          45
Pro Ser Ala Gly Asp Gly Asn Gln Asp Asp Gly Pro Gln Gly
                 50
                                                          60
                                      55
Pro Pro Gln Gln Gly Gln Gln Gln Gln Gly Pro Pro Pro
                 65
                                      70
                                                          75
Gln Gly Lys Pro Gln Gly Pro Pro Gln Gln Gly Gly His Pro Pro
                 80
                                      85
                                                          90
Pro Pro Gln Gly Arg Pro Gln Gly Pro Pro Gln Gln Gly Gly His
                 95
                                     100
                                                         105
Pro Arg Pro Pro Arg Gly Arg Pro Gln Gly Pro Pro Gln Gln Gly
                110
                                    115
                                                         120
Gly His Gln Gln Gly Pro Pro Pro Pro Pro Gly Lys Pro Gln
                125
                                     130
                                                         135
Gly Pro Pro Pro Gln Gly Gly Arg Pro Gln Gly Pro Pro Gln Gly
                140
                                     145
                                                         150
Gln Ser Pro Gln
<210> 45
<211> 129
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500203CD1
<400> 45
Met Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu
                  5
                                     10
Ser Cys Leu Ile Leu Leu Cys Gln Val Gln Gly Glu Glu Thr Gln
                 20
                                     25
Lys Glu Leu Pro Ser Pro Arg Ile Ser Cys Pro Lys Gly Ser Lys
                 35
                                     40
Ala Tyr Gly Ser Pro Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser
                 50
                                     55
                                                          60
Trp Met Asp Ala Asp Gly Ser Glu Pro Asp Gly Asp Gly Trp Glu
                 65
                                     70
Trp Ser Ser Thr Asp Val Met Asn Tyr Phe Ala Trp Glu Lys Asn
                 80
                                     85
                                                          90
Pro Ser Thr Ile Leu Asn Pro Gly His Cys Gly Ser Leu Ser Arg
                 95
                                    100
                                                         105
```

```
Leu Pro Tyr Val Cys Lys Phe Lys Asp
               125
<210> 46
<211> 116
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4843802CD1
<400> 46
Met Lys Gly Ala Arg Asp Ala Ser Pro Ser Leu Ser Trp Ala Ala
 1
                                    10
Ala Ala Val Gly Ser Ala Leu Gly Arg Ala Gly Glu Gly Thr Ser
                20
Met Val Gly Cys Lys Lys Pro Leu Gly Gln Gln Ile Pro Arg Pro
                35
                                    40
Phe Pro Thr Cys Ser Thr Ser Trp Pro Leu Gly Cys Phe Leu His
                50
Leu Glu His Ser Ser Ser Arg Lys Pro Arg Gly Ser Leu Ser Asp
                65
                                    70
Phe Leu Gln Glu Val Ser Leu Leu Thr Gly Pro Ser Leu Thr Thr
                80
                                    85
Gln Asp Lys Ser Val His Ala Leu Ser Leu Pro Pro Pro Thr Leu
                95
                                   100
Pro Arg Pro Ser Asp Leu Pro Ala His Cys Trp
               110
<210> 47
<211> 84
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 5877522CD1
<400> 47
Met Arg Leu Phe Ile Leu Phe Ser Pro Gly Leu Ala Trp Thr His
                                   10
His His His His His His His Gln Trp Leu Ser Pro His
                35
                                    40
Cys Ala Ser Trp Glu Pro Gly Ser Ala Ser Arg Leu His Gly His
                50
                                   55
Tyr Arg Arg Glu Gln Ser His Leu Ser Gly Ser Cys Gly Lys Arg
                65
                                    70
Pro Arg Val Asp Leu Thr Gln Val Cys
                80
<210> 48
<211> 83
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 617491CD1
<400> 48
Met Ala Asn Ala Pro Pro Pro Cys Cys Ser Ser Ser Cys Ser Cys
                                                       15
                                   10
```

Ser Thr Gly Phe Leu Lys Trp Lys Asp Tyr Asn Cys Asp Ala Lys

```
Phe Leu Leu Pro Ser Leu Leu Ala Trp Asn Ser His Ser Asp Ser
                  20
Pro Asn His Asp Thr Gln Asn Ala Thr Ser Lys Lys Asn Ile Arg
                  35
                                       40
                                                           45
Val Gly Ala Ser Ala Ser Ser Glu Leu Thr Ser Leu Leu Cys Pro
                  50
Leu Leu Thr Arg Pro Pro Phe Ser Phe Gly Cys Asn Ser Phe Gln
                  65
                                      70
Pro Pro His Ser Phe Asp Arg Arg
                  80
<210> 49
<211> 133
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6289901CD1
<400> 49
Met Met Cys Tyr Ala Phe Trp Pro Ala Asp Val Gln Val Asp Ser
Asp Leu Arg His Ile Gln Lys Tyr Val Cys Ile Leu Ala Leu Gly
                  20
                                                           30
Leu Cys Ile Ser Ser Ser Leu Gly His Ser Thr Lys His Phe Gln
                  35
                                      40
Lys Gly Trp Ser Leu Pro Leu Asn Trp Phe Leu Leu Leu Ala Thr
                  50
                                      55
                                                           60
Ala Phe Gln Leu Asp Phe Gly Lys Ser Pro Tyr Ser Phe Lys Thr
                  65
                                      70
Ile Val Ser Pro Leu Ala Ser Phe Gln Val Ser Tyr Glu Ser Met
                  80
                                      85
                                                           90
Arg Ser Leu His Pro Met Ser Ser Lys Glu Leu Ile Met Leu Arg
                 95
                                     100
                                                          105
Leu Ala Gly Asp Leu Arg Thr Leu Thr Ser Ile Met Asn Cys Asp
                110
                                     115
                                                          120
Arg Lys Glu Cys Ile Leu Leu Thr Asn Pro Pro Ala Val
                125
                                     130
<210> 50
<211> 117
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6817709CD1
<400> 50
Met Lys Met Thr Ser Ile Phe Cys Leu Pro Val Ser Gly Glu Ala
Trp Pro Glu Glu Pro Lys Lys Gly Phe Ser Ala Leu Thr Leu Thr
                                      25
Asp Leu Glu Leu Gly Gln Thr Pro Leu Pro Leu Leu Ala His Phe
                 35
                                      40
Pro Ile Cys Lys Met Gly Ser Leu Glu Glu Met Ile Pro Glu Val
                 50
                                      55
                                                           60
Cys Ser Ser Ser Asn Cys Asn Thr Gly Ser Asn Trp Cys Leu Ser
                                      70
                 65
                                                          75
Ser Leu Val Cys Ala Glu Pro Arg Glu Thr Lys Asp Gly Met Val
                 80
                                      85
                                                          90
Val His Thr Cys Asn Pro Ser Ser Pro Leu Cys Thr Gln Trp Pro
                 95
                                     100
                                                         105
Glu His Ser Tyr His Val Ser Ala Leu Asn Leu Gln
```

115

```
<210> 51
<211> 99
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6849312CD1
<400> 51
Met His Lys Phe Leu Cys Ser Lys Ile Tyr Leu Tyr Phe Leu Leu
                                       10
Leu Cys Leu Asn Phe Ser His Ser Trp Arg Asp Phe His Cys Thr
                  20
                                      25
Glu Val Arg Glu Glu Asp Thr His Val Phe Cys Asn Tyr Ala Tyr
                  35
                                       40
Thr Val Asp Pro His Phe Phe Val Asp Leu Val Phe Val Cys Leu
                  50
                                      55
Pro Pro Cys Gln Ser Leu Phe Val Thr Pro Lys Leu Met Ile Leu
                  65
                                      70
                                                           75
Leu Val Ser Trp Ser Phe Ala Asp Met Cys Arg Ala Val Lys Tyr
                  80
                                      85
Gly Val Thr Asn Val His Val Pro Ile
                  95
<210> 52
<211> 114
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7409581CD1
<400> 52
Met Leu Gln Gln Arg Gln Asp Leu Leu Thr Leu His Ser Gln Pro
Ile Trp Tyr Leu Trp Phe Arg Leu Phe Phe Trp Val Val Leu Arg
                  20
Val Ser Gln Gly Thr Met Lys Ser Gln Arg Val Met Cys Ile Leu
                 35
                                      40
Pro Ser Pro Ser Ala Phe Pro Ala Glu Arg Arg Gly Ser Pro Ser
                 50
                                      55
Ser Gly Arg Gly Lys Ser Pro Pro Pro Ala Gln Leu Leu His Pro
                 65
                                      70
Ala Gln Gly Arg Trp Asp Phe Val Ala Thr Ile Leu Cys Thr Val
                 80
                                      85
Tyr Ser Glu Leu Lys His Ser Gly Trp Pro Gly Thr Val Ala His
                 95
                                     100
Ser Cys Asn Pro Ser Thr Leu Gly Gly
                110
<210> 53
<211> 699
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7437113CD1
<400> 53
Met Ala Asp Pro Glu Val Cys Cys Phe Ile Thr Lys Ile Leu Cys
                                      10
Ala His Gly Gly Arg Met Ala Leu Asp Ala Leu Leu Gln Glu Ile
Ala Leu Ser Glu Pro Gln Leu Cys Glu Val Leu Gln Val Ala Gly
```

				35					40					45
Pro	Asp	Arg	Phe		Val	Leu	Glu	Thr		Gly	Glu	Ala	Gly	
Thr	Arg	Ser	Val		Ala	Thr	Thr	Arg		Arg	Val	Суз	Arg	
Lys	Tyr	Суѕ	Gln		Pro	Сув	Asp	Asn		His	Leu	Сув	Lys	-
Asn	Leu	Leu	Gly	Arg 95	Суз	Asn	Tyr	Ser	Gln 100	Ser	Glu	Arg	Asn	
Сув	Lys	Tyr	Ser	His 110	Glu	Val	Leu	Ser	Glu 115	Glu	Asn	Phe	Lys	Val 120
Leu	ràs	Asn	His	Glu 125	Leu	Ser	Gly	Leu	Asn 130	Lys	Glu	Glu	Leu	Ala 135
Val	Leu	Leu	Leu	Gln 140	Ser	Asp	Pro	Phe	Phe 145	Met	Pro	Glu	Ile	Суз 150
_	Ser	_	-	155		_	_		160		_			165
Pro	Pro	Cys	Ser	Arg 170	Leu	His	Ile	Сув	Asp 175	His	Phe	Thr	Arg	Gly 180
	Суз	_		185		_		_	190					195
	Lys			200					205					210
	Val			215			_		220					225
_	Asn			230		_		•	235			_	_	240
_	Ala		_	245		_	_		250					255
-	Ser			260					265					270
	Asp			275					280					285
	Ser			290	:				295	_				300
_	Asp		_	305		_			310	_			_	315
	Glu			320					325				_	330
	Thr			335		•	_		340		_			345
	Leu	_	_	350				_	355	_				360
Val	Phe	Ser	Pro	365 Thr	Leu	Pro	Ala	Ala	370 Arg	Ser	Ser	Leu	Gly	
Leu	Gln	Thr	Pro		Ala	Val	Thr	Thr		Lys	Gly	Thr	Gly	390 Leu
Leu	Ser	Ser	Asp		Arg	Ile	Ile	Asn		Lys	Ser	Gly	Thr	
Asp	Ile	Gln	Pro		Pro	Leu	Phe	Asn		Asn	Ala	Asp	Gly	
Ala	Thr	Asp	Ile	425 Thr 440	Ser	Thr	Arg	Ser		Asn	Tyr	Lys	Ser	435 Thr 450
Ser	Ser	Gly	His		Glu	Ile	Ser	Ser	445 Pro 460	Arg	Ile	Gln	Asp	
Gly	Pro	Ala	Ser		Asp	Val	Gln	Ala		Gly	Arg	Ile	Ala	
Asp	Ala	Asp	Pro		Val	Ala	Leu	Val		Asp	Ser	Leu	Ser	
Val	Thr	Ser	Thr		Ser	Ser	Arg	V al		Asp	His	Asp	Ser	
Glu	Ile	Сув	Leu		His	Leu	Cys	Lys		Cys	Pro	Leu	Asn	
Ser	Суз	Ser	Lys	Val 530	His	Phe	His	Leu		Tyr	Arg	Trp	Gln	Met 540

```
Leu Ile Gly Lys Thr Trp Thr Asp Phe Glu His Met Glu Thr Ile
                545
                                     550
Glu Lys Gly Tyr Cys Asn Pro Gly Ile His Leu Cys Ser Val Gly
                560
                                     565
                                                          570
Ser Tyr Thr Ile Asn Phe Arg Val Met Ser Cys Asp Ser Phe Pro
                575
                                     580
Ile Arg Arg Leu Ser Thr Pro Ser Ser Val Thr Lys Pro Ala Asn
                590
                                     595
Ser Val Phe Thr Thr Lys Trp Ile Trp Tyr Trp Lys Asn Glu Ser
                605
                                     610
Gly Thr Trp Ile Gln Tyr Gly Glu Glu Lys Asp Lys Arg Lys Asn
                620
                                     625
                                                          630
Ser Asn Val Asp Ser Ser Tyr Leu Glu Ser Leu Tyr Gln Ser Cys
                                     640
                635
                                                          645
Pro Arg Gly Val Val Pro Phe Gln Ala Gly Ser Arg Asn Tyr Glu
                650
                                     655
Leu Ser Phe Gln Gly Met Ile Gln Thr Asn Ile Ala Ser Lys Thr
                665
                                     670
                                                         675
Gln Lys Asp Val Ile Arg Arg Pro Thr Phe Val Pro Gln Trp Tyr
                680
                                     685
                                                         690
Val Gln Gln Met Lys Arg Gly Pro Glu
                695
<210> 54
<211> 144
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500260CD1
<400> 54
Met Ala Leu Cys Pro Gly Gly Ser Pro Gln His Gln Asp Leu Ala
                                      10
                                                          15
Gly Gln Leu Val Val His Glu Leu Phe Ser Ser Val Leu Gln Glu
                 20
                                      25
                                                          30
Ile Cys Asp Glu Val Asn Leu Pro Leu Leu Thr Leu Ser Gln Pro
                 35
                                      40
                                                          45
Leu Leu Gly Ile Ala Arg Asn Glu Thr Ser Ala Gly Arg Ala
                 50
                                      55
Ser Ala Glu Phe Tyr Val Gln Cys Ser Leu Thr Ser Glu Gln Val
                                      70
Arg Lys His Tyr Leu Ser Gly Gly Pro Glu Ala His Glu Ser Thr
                 80
                                      85
                                                          90
Gly Ile Phe Phe Val Glu Thr Gln Asn Val Arg Arg Leu Pro Glu
                                                         105
Thr Glu Met Trp Ala Glu Leu Cys Pro Ser Ala Lys Gly Ala Ile
                110
                                    115
Ile Leu Tyr Asn Arg Val Gln Gly Ser Pro Thr Gly Ala Ala Leu
                125
                                                         135
Gly Ser Pro Ala Leu Leu Pro Pro Leu
                140
<210> 55
<211> 382
<212> PRT
<213> Homo sapiens
<221> misc_feature
<223> Incyte ID No: 7659504CD1
Met Pro Pro Leu Lys Leu Pro Lys Arg Gly Leu Glu Phe Trp Lys
Leu Ser Ala Ala Asp Val Ser Gly Val Trp Ala Met Val Phe Ala
```

```
Gln Arg Gly Asp Gly Ala Gln Met Gln Gly Pro Leu Met Val Thr
                 35
                                      40
Ala Val Ser Gly Ala Val Lys Asp Gly Pro Gly Ser Gly Leu His
                                                          60
Phe Pro Glu Cys Thr Val Pro Arg Ala Thr Ser Cys Gln Pro Ser
Val Pro Leu Gly Leu Ile Glu Arg Ser Arg Asn Leu Pro Pro Ser
                 80
                                      85
                                                          90
Arg Asp Arg Ala Gly Ser Ala Phe Pro Ala Arg Cys Leu Thr
                 95
                                     100
Lys Lys Glu Ser Arg Glu Gly Leu Val Asp Leu Met Phe Met Leu
                110
                                     115
Val Gly Asn Leu Ile Asn Val Arg Asn Val Gly Lys Pro Ile Phe
                125
                                     130
Gly Ala His Thr Leu Leu Asp Ile Ser Glu Phe Ile Leu Ala Gly
                140
                                     145
Asn Leu Met Asn Val Ser Asn Ala Gly Arg Leu Leu Gly Leu
                155
                                     160
Arg Ile Leu Leu Asn Met Arg Lys Phe Thr Met Arg Gly Asn Pro
                170
                                     175
Met Asn Val Arg Asn Val Glu Arg Pro Phe Phe Met Ala Gln Ser
Leu Ile Asp Ile Arg Lys Phe Ile Leu Val Arg Glu Thr Met Asn
                200
                                     205
Val Arg Asn Val Glu Arg Pro Phe Phe Val Val Gln Asn Leu Ile
                215
                                     220
Asp Thr Arg Lys Phe Ile Leu Glu Arg Gly His Met Asn Val Lys
                230
                                     235
Asn Val Glu Lys Pro Phe Ser Gly Val His Asn Leu Leu Asp Ile
                245
                                     250
Arg Glu Cys Ile Leu Val Arg Asn Leu Thr Tyr Val Lys Asn Val
                260
                                     265
                                                         270
Gly Asn Leu Leu Ser Gly Val His Ser Leu His Asp Ile Arg Lys
                275
                                     280
Phe Ile Leu Met Gln Asn Leu Met Asp Ala Arg Lys Val Ala Thr
                290
                                     295
Ser Leu Val Thr Ile His Ile Leu Leu Asn Lys Lys Phe Ile Ile
                305
                                     310
Val Gln Ile Ser Val Asn Gly Gln Thr Met Gly Thr Pro Leu Val
                320
                                     325
Met Ser Gln Thr Leu Leu Asn Thr Arg Ile Phe Thr Leu Leu Arg
                335
                                     340
Asn Pro Met Asn Leu Lys Ile Leu Arg Lys His Phe Leu Gln Ala
                350
                                     355
                                                         360
Leu Thr Ser Phe His Ser Cys Glu Ile Leu Tyr Lys Ser Val Gly
                365
                                    370
Arg Ala Leu Phe Met Thr His
                380
<210> 56
<211> 93
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 821165CD1
<400> 56
Met Arg Pro Pro Ile Trp Ser Leu Leu Ser Ser Leu Pro Leu Pro
Gly Ala Pro Pro Pro Thr Pro Ser Ser Leu Pro Pro Ser Pro Leu
                 20
                                     25
Gly Pro Pro Pro Ala Trp Ala Pro Val Cys Leu Ser Pro Ala Ser
Gln Gln Asn Cys Gly Ser Met Ser Arg Asp Lys Val Leu Arg Gly
```

<213> Homo sapiens

```
50
Thr Gly Phe Gly Pro Phe Leu Pro Ala Arg Tyr Phe Ala Ala Gly
                                      70
                  65
Arg Gly Gly Cys Ile Arg Phe Leu Cys Pro Gln Ser Thr Thr Ser
Phe Ser Ser
<210> 57
<211> 110
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499672CD1
<400> 57
Met Thr Glu Trp Pro Ser Pro Gly Lys Thr Ser Val Val Thr Gly
Ile Lys Leu Trp Asn Val Arg Val Lys Ala Arg Val Cys Cys Glu
                 20
                                      25
                                                           30
Leu Glu Leu Arg Glu Cys Leu Gly Ile Pro Pro Gly Ile Ser Lys
                  35
Gly Thr Met Ala Thr Ala Ser Leu Ala His Val Arg His Leu Leu
                 50
                                      55
Cys Gln Ala Phe Ser Val Val Glu Lys Gly Gly Arg Arg Met Gln
                 65
                                      70
Leu Phe Gln Cys Cys Leu Ala Val Pro Lys Ser Arg Asp Trp Ala
                 80
                                      85
                                                          90
Pro His Leu Thr Ser Asn Phe Arg Phe Thr Leu Gly His Ser Cys
                 95
                                     100
                                                         105
Leu Pro Leu Gln Ser
<210> 58
<211> 115
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500276CD1
<400> 58
Met Arg Phe Leu Ala Ala Thr Phe Leu Leu Leu Ala Leu Ser Thr
Ala Ala Gln Ala Glu Pro Val Gln Phe Lys Asp Cys Asp Ile Gln
                 20
                                      25
Ser Lys Ser Ser Lys Ala Val Val His Gly Ile Leu Met Gly Val
                 35
                                      40
Pro Val Pro Phe Pro Ile Pro Glu Pro Asp Gly Cys Lys Ser Gly
                 50
                                      55
                                                          60
Ile Asn Cys Pro Ile Gln Lys Asp Lys Thr Tyr Ser Tyr Leu Asn
                  65
                                      70
Lys Leu Pro Val Lys Ser Glu Tyr Pro Ser Ile Lys Leu Val Val
                 80
                                      85
Glu Trp Gln Leu Gln Asp Asp Lys Asn Gln Ser Leu Phe Cys Trp
                 95
                                     100
                                                         105
Glu Ile Pro Val Gln Ile Val Ser His Leu
                110
<210> 59
<211> 161
<212> PRT
```

```
<220>
<221> misc_feature
<223> Incyte ID No: 1440723CD1
<400> 59
Met Ala Pro Ser Gln Val Phe Gly Leu Cys Leu Thr Thr Phe Ser
                                                          15
Leu Glu Lys Cys Gly Val Lys Ser Asp Met Gly Leu His Arg Gln
                 20
                                      25
                                                          30
Pro Pro Gly Gly Gly Leu Ala Pro Pro Ala Ala Gly Gly Cys
                                      40
                                                           45
His Gly His Leu Gln Gly Trp Leu Ser Gly Pro Ser Val Glu Ala
                 50
                                      55
                                                          60
His Gln Glu Ala Pro Pro Val Pro Gly Leu Ser Gln Glu His Arg
                                                          75
                                      70
Pro Gly Arg Gly Arg Ala Gly Gly Gln Trp His Glu Val Arg His
                 80
                                      85
Gly Val Gly Pro Thr Pro Gln Ala Ala His His Pro Gln Pro Pro
                 95
                                    100
                                                         105
Cys Ser Val Cys Lys Met Gly Pro Gln Trp Gly Leu Gly Arg Gly
                110
                                     115
                                                         120
Glu Asn Cys Pro Leu Pro Gln Ala Arg Ser Pro Glu Ser Trp Arg
                125
                                     130
                                                         135
Pro Ala Ser Pro Pro His Pro Ala Pro Pro Gln Gln Thr Leu Leu
                140
                                    145
                                                         150
Pro Val Gly Arg Cys Ala Arg Leu Gly Pro Leu
<210> 60
<211> 88
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7479612CD1
<400> 60
Met Tyr Leu Phe Ala Phe Leu Cys Cys Val Leu Leu Asn Ile Val
  1
Ile Leu Leu Phe Leu Val Lys Phe His Glu Leu Leu Cys Thr Leu
                 20
                                     25
Val Ser His Thr Gln His His Thr Asn Asn Glu Ile Ile Ser Asn
                 35
                                      40
Phe Lys Leu Ile Asp Trp Leu Ser Cys Ala Ile Asn Asp Asn
                 50
                                     55
                                                          60
Ala Ile Cys Glu Pro Ala Arg His Arg Gln Asn Cys Leu Glu Lys
                 65
                                     70
Ser Leu Ile Ser Thr Ser Cys Ile Asn Ser Asn Ser Pro
<210> 61
<211> 79
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1391514CD1
<400> 61
Met His Gln Gly Ser Val Phe Phe Tyr Phe Tyr Phe Leu Ser Leu
Ala Leu Ser Pro Arg Leu Glu Cys Lys Gly Ala Ile Ser Ala His
                 20
                                     25
Cys Asn Leu Tyr Leu Ile Gly Leu Ser Ile Ser Leu His Ile Ala
                 35
```

<400> 64

```
Arg Ser Pro Cys Leu Phe Pro Asp Leu Leu Ala Trp Asp Phe Val
Pro Gly Gly Ile Pro Leu Val Cys Pro Pro Ser Gly Leu Val Ser
His Arg Leu Cys
<210> 62
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2102578CD1
<400> 62
Met Asp Ser Arg Gly Ser Pro Leu Gly Gly Leu Gly Leu Pro Cys
                                      10
                                                           15
Gly Ala Ser Leu Arg Arg Thr Pro Ala Ser Pro Ser Asp Ala Ile
                                      25
                                                           30
Gln Arg Ala Leu Pro Gly Arg Lys Leu Pro Arg Trp Asn Ala Ser
                                      40
                                                           45
Pro Glu Gln Arg Val Ala Val Pro Cys Gly Gly Leu Thr Gln Trp
                  50
                                      55
                                                           60
Leu Asn Thr Gly Lys Glu Leu Ala Leu Gly Val Arg Thr Ser Glu
Thr
<210> 63
<211> 116
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3213122CD1
<400> 63
Met Gln Pro Cys Leu Ala Leu Cys Ala Pro Ala Cys Ser Leu Gln
                                      10
Gln Pro Arg Glu Arg Gln Arg Gln Tyr Leu Leu Gly Lys Ser Trp
                 20
                                      25
                                                          30
Lys Ala Gly Trp Ala Tyr Trp Leu Val Pro Gly Gly Arg Leu Arg
                                      40
                                                          45
Pro Trp Asp Arg Arg Val Pro Thr Leu Pro Ser Gln Leu Leu Ala
                 50
                                      55
Pro Gly Val Arg Pro Leu Ser Ser Lys Ser Gly Pro Arg Pro Phe
                 65
                                      70
Pro Leu Trp Ser Ser Leu Phe His Leu Gln Gly Ala Gln Cys Pro
                 80
                                      85
                                                          90
Glu Leu Gly Val Ser Glu Val Ala Arg Gly Ala Ser Gly Ala Gly
                 95
                                     100
Cys Arg Ser Cys His Ser Pro Ser Thr Val Leu
                110
<210> 64
<211> 558
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4326307CD1
```

Met Thr Val Phe Pro Leu Ser Ser Phe Phe Ile Leu Ile Phe Tyr Leu Ser Leu Pro Asn Ser Phe Pro Asp Ile Thr Glu Asn Met Lys Glu Leu Lys Glu Ala Arg Pro Arg Lys Asp Asn Arg Arg Pro Asp Leu Glu Ile Tyr Lys Pro Gly Leu Ser Arg Leu Arg Asn Lys Pro Lys Ile Lys Glu Pro Pro Gly Ser Glu Glu Phe Lys Asp Glu Ile Val Asn Asp Arg Asp Cys Ser Ala Val Glu Asn Gly Thr Gln Pro Val Lys Asp Val Cys Lys Glu Leu Asn Asn Gln Glu Gln Asn Gly Pro Ile Asp Pro Glu Asn Asn Arg Gly Gln Glu Ser Phe Pro Arg Thr Ala Gly Gln Glu Asp Arg Ser Leu Lys Ile Ile Lys Arg Thr Lys Lys Pro Asp Leu Gln Ile Tyr Gln Pro Gly Arg Arg Leu Gln Thr Val Ser Lys Glu Ser Ala Ser Arg Val Glu Glu Glu Glu Val Leu Asn Gln Val Glu Gln Leu Arg Val Glu Glu Asp Glu Cys Arg Gly Asn Val Ala Lys Glu Glu Val Ala Asn Lys Pro Asp Arg Ala Glu Ile Glu Lys Ser Pro Gly Gly Gly Arg Val Gly Ala Ala Lys Gly Glu Lys Gly Lys Arg Met Gly Lys Gly Glu Gly Val Arg Glu Thr His Asp Asp Pro Ala Arg Gly Arg Pro Gly Ser Ala Lys Arg Tyr Ser Arg Ser Asp Lys Arg Arg Asn Arg Tyr Arg Thr Arg Ser Thr Ser Ser Ala Gly Ser Asn Ser Ala Glu Gly Ala Gly Leu Thr Asp Asn Gly Cys Arg Arg Arg Gln Asp Arg Thr Lys Glu Arg Pro Pro Leu Lys Lys Gln Val Ser Val Ser Ser Thr Asp Ser Leu Asp Glu Asp Arg Ile Asp Glu Pro Asp Gly Leu Gly Pro Arg Arg Ser Ser Glu Arg Lys Arg His Leu Glu Arg Asn Trp Ser Gly Arg Gly Glu Gly Glu Gln Lys Thr Ser Ala Lys Glu Tyr Arg Gly Thr Leu Arg Val Thr Phe Asp Ala Glu Ala Met Asn Lys Glu Ser Pro Met Val Arg Ser Ala Arg Asp Asp Met Asp Arg Gly Lys Pro Asp Lys Gly Leu Ser Ser Gly Gly Lys Gly Ser Glu Lys Gln Glu Ser Lys Asn Pro Lys Gln Glu Leu Arg Gly Arg Gly Arg Gly Ile Leu Ile Leu Pro Ala His Thr Thr Leu Ser Val Asn Ser Ala Gly Ser Pro Glu Ser Ala Pro Leu Gly Pro Arg Leu Leu Phe Gly Ser Gly Ser Lys Gly Ser Arg Ser Trp Gly Arg Gly Gly Thr Thr Arg Arg Leu Trp Asp Pro Asn Asn Pro Asp Gln Lys Pro Ala Leu Lys Thr Gln Thr Pro Gln Leu His Phe Leu Asp Thr Asp Asp Glu Val Ser Pro Thr Ser Trp Gly Asp Ser Arg Gln Ala Gln Ala Ser Tyr Tyr Lys Phe Gln Asn Ser Asp Asn Pro Tyr Tyr Tyr Pro Arg Thr

```
500
                                     505
                                                          510
Pro Gly Pro Ala Ser Gln Tyr Pro Trp His Val Trp Glu Gln Phe
                515
                                     520
                                                          525
Leu Leu Glu Arg Met Leu Asn Leu Gln Val Asn Phe Lys Ser
                                                          Pro
                530
                                     535
                                                          540
Ala Thr Ser Gly Lys Lys His Glu Gly Ile Lys Gly Gln Ala
                545
                                     550
Ala Gln Arg
<210> 65
<211> 155
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6037749CD1
<400> 65
Met Ala Val Phe His Asp Met Leu Leu Gln Pro Leu Gly Met Phe
Leu Cys Leu Ser Leu Gln Leu Ser Ser Ala Thr Phe Ile Arg Tyr
                 20
                                                           30
Ser Ser Thr Cys Phe Thr Phe Asp Glu Tyr Tyr Thr Ile Thr Leu
                 35
                                      40
                                                           45
Asp Ile Lys Ala Ser Ser His Ile Tyr Glu Ser Asn Ala Val Tyr
                 50
                                      55
                                                           60
Ser Val Phe Val Pro Val Asn Asp Ser Val Tyr Ala Val Val Met
                 65
                                      70
                                                           75
Lys Thr Leu Asp Glu Asn Ser Asp Ser Ala Gly Leu Trp Gln Arg
                 80
                                      85
                                                           90
Ala Asp Lys Asn Cys Tyr Ser Asn Ser Thr Tyr Tyr Val Lys Asp
                 95
                                     100
                                                          105
Gln Tyr Met Thr Val Leu Glu Ala Gln Trp Gln Ala Pro Glu Pro
                110
                                     115
                                                          120
Glu Asn Ile Thr Glu Val Glu Ile Gln Ala Phe Thr Val Gln Ile
                125
                                     130
                                                          135
Arg Ala Leu Pro Ile Leu Pro Thr Leu Lys Leu Arg Glu Lys Arg
                140
                                     145
Tyr Lys Glu Leu Leu
                155
<210> 66
<211> 77
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6285519CD1
<400> 66
Met Gly Gln Lys Gln Ile Thr Met Val Glu Cys His Gln Leu Arg
Leu Phe Ser Leu Leu Leu Trp Ile Phe Ser Cys Phe Arg Pro Ser
                 20
                                      25
                                                           30
Gly Cys Ile Arg Ala Gly Tyr Arg Gly Tyr Asp Gly Leu Ala Trp
                 35
                                      40
Ala Gln Thr Val Pro Ala Pro Gln Thr Pro Ser Arg Gly Leu Glu
                 50
                                      55
Val Lys Trp Gln Gly Ala Glu Leu Ser Cys Val Thr Cys Gln Gly
                                      70
Leu His
```

<210> 67

```
<211> 240
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 70336045CD1
<400> 67
Met Ala Thr Asp Glu Leu Ala Thr Lys Leu Ser Arg Arg Leu Gln
                                     10
Met Glu Gly Glu Gly Gly Glu Thr Pro Glu Gln Pro Gly Leu
                 20
                                      25
Asn Gly Ala Ala Ala Ala Ala Gly Ala Pro Asp Glu Ala Ala
                                      40
Glu Ala Leu Gly Ser Ala Asp Cys Glu Leu Ser Ala Lys Leu Leu
                                      55
Arg Arg Ala Asp Leu Asn Gln Gly Ile Gly Glu Pro Gln Ser Pro
                 65
                                     70
Ser Arg Arg Val Phe Asn Pro Tyr Thr Glu Phe Lys Glu Phe Ser
                 80
                                     85
Arg Lys Gln Ile Lys Asp Met Glu Lys Met Phe Lys Gln Tyr Asp
                 95
                                    100
                                                         105
Ala Gly Arg Asp Gly Phe Ile Asp Leu Met Glu Leu Lys Leu Met
                110
                                    115
Met Glu Lys Leu Gly Ala Pro Gln Thr His Leu Gly Leu Lys Asn
                125
                                    130
                                                         135
Met Ile Lys Glu Val Asp Glu Asp Phe Asp Ser Lys Leu Ser Phe
                140
                                    145
                                                         150
Arg Glu Phe Leu Leu Ile Phe Arg Lys Ala Ala Ala Gly Glu Leu
                155
                                    160
                                                         165
Gln Glu Asp Ser Gly Leu Cys Val Leu Ala Arg Leu Ser Glu Ile
                170
                                    175
Asp Val Ser Ser Glu Gly Val Lys Gly Ala Lys Ser Phe Phe Glu
                185
                                    190
                                                         195
Ala Lys Val Gln Ala Ile Asn Val Ser Ser Arg Phe Glu Glu Glu
                200
                                    205
                                                         210
Ile Lys Ala Glu Glu Glu Arg Lys Lys Gln Ala Glu Glu Met
                215
                                    220
                                                         225
Lys Gln Arg Lys Ala Ala Phe Lys Glu Leu Gln Ser Thr Phe Lys
                230
                                                         240
<210> 68
<211>, 101
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7153577CD1
<400> 68
Met Ala Phe Arg Pro Cys Pro Ser Leu Ser Ala His Thr Val Ser
Cys Gly Ser Tyr Ala Pro Phe Cys Ser Ser Ser Leu Ser Pro Pro
                                     25
Ile Ser Ala Arg Cln Ser Leu Arg Pro Val Lys Ile Ile Thr Gln
                 35
                                     40
Phe Ser Trp Lys Leu Ile Ser Pro Cys Asp Pro Ala Gln Ile Leu
                 50
                                     55
Pro Thr Val Phe Leu Asn Gly Leu Gly Glu Ile Gln Ser Gly Met
Ala Ser Leu Ala Gln Ala Gly Glu Trp Glu Arg Leu Gln Gly Ser
                 80
                                     85
Ser Cys Tyr Tyr Phe Tyr Phe Tyr Ile Leu Tyr
```

```
<210> 69
<211> 129
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500299CD1
<400> 69
Met Arg Pro Gly Ala Pro Gly Pro Leu Trp Pro Leu Pro Trp Gly
Ala Leu Ala Trp Ala Val Gly Phe Val Ser Ser Met Gly Ser Gly
Asn Pro Ala Pro Glu Ser Cys Glu His Val Val Cys Pro Arg Pro
                 35
                                     40
Gln Ser Cys Val Val Asp Gln Thr Gly Ser Ala His Cys Val Val
                 50
                                     55
Cys Arg Ala Ala Pro Cys Pro Val Pro Ser Cys Pro Gly Gln Glu
                 65
                                     70
Leu Cys Gly Asn Asn Asn Val Thr Tyr Ile Ser Ser Cys His Met
Arg Gln Ala Thr Cys Phe Leu Gly Arg Ser Ile Gly Val Arg His
                 95
                                    100
                                                         105
Ala Gly Ser Cys Ala Gly Thr Pro Asp Glu Pro Pro Gly Gly Glu
                110
                                    115
Ser Ala Glu Glu Glu Asn Phe Val
                125
<210> 70
<211> 500
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7480218CD1
<400> 70
Met Lys Cys Thr Ala Arg Glu Trp Leu Arg Val Thr Thr Val Leu
                                     10
Phe Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr
                 20
                                     25
                                                          30
Leu Leu Glu Lys Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu
Trp Trp Ile Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn
Asp Met Gln Ser Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln
                                     70
                 65
Val Tyr Pro Thr Ala Ser Asn Met Glu Tyr Met Thr Trp Asp Val
                 80
                                     85
                                                          90
Glu Leu Glu Arg Ser Ala Glu Ser Trp Ala Glu Ser Cys Leu Trp
                                    100
                                                         105
Glu His Gly Pro Ala Ser Leu Leu Pro Ser Ile Gly Gln Asn Leu
                110
                                    115
                                                         120
Gly Ala His Trp Gly Arg Tyr Arg Pro Pro Thr Phe His Val Gln
                125
                                    130
Ser Trp Tyr Asp Glu Val Lys Asp Phe Ser Tyr Pro Tyr Glu His
                140
                                    145
                                                         150
Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys Ser Gly Pro Val Cys
                155
                                    160
                                                         165
Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser Asn Arg Ile Gly
                170
                                    175
                                                         180
Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp Gly Gln Ile
                185
                                    190
Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro Lys Gly
```

```
200
                                     205
Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys Ser
                215
                                     220
                                                          225
Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
                230
                                     235
                                                          240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu
                245
                                     250
Thr Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His
                260
                                     265
                                                          270
Val Arg Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser
                275
                                     280
                                                          285
Ser Gln Gln Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg
                290
                                     295
Asp Gln Cys Lys Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala
                305
                                     310
Gly Cys Leu Asp Ser Lys Ala Lys Val Ile Gly Ser Val His Tyr
                320
                                     325
Glu Met Gln Ser Ser Ile Cys Arg Ala Ala Ile His Tyr Gly Ile
                335
                                     340
Ile Asp Asn Asp Gly Gly Trp Val Asp Ile Thr Arg Gln Gly Arg
                350
                                     355
Lys His Tyr Phe Ile Lys Ser Asn Arg Asn Gly Ile Gln Thr Ile
                365
                                     370
Gly Lys Tyr Gln Ser Ala Asn Ser Phe Thr Val Ser Lys Val Thr
                380
                                     385
Val Gln Ala Val Thr Cys Glu Thr Thr Val Glu Gln Leu Cys Pro
                395
                                     400
Phe His Lys Pro Ala Ser His Cys Pro Arg Val Tyr Cys Pro Arg
                410
                                     415
Asn Cys Met Gln Ala Asn Pro His Tyr Ala Arg Val Ile Gly Thr
                425
                                     430
Arg Val Tyr Ser Asp Leu Ser Ser Ile Cys Arg Ala Ala Val His
                440
                                     445
Ala Gly Val Val Arg Asn His Gly Gly Tyr Val Asp Val Met Pro
                455
                                     460
Val Asp Lys Arg Lys Thr Tyr Ile Ala Ser Phe Gln Asn Gly Ile
                470
                                     475
                                                         480
Phe Ser Glu Ser Leu Gln Asn Pro Pro Gly Gly Lys Ala Phe Arg
                485
                                     490
                                                          495
Val Phe Ala Val Val
                500
<210> 71
<211> 402
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501159CD1
<400> 71
Met Ala Val Ser Gly Phe Thr Leu Gly Thr Cys Ile Leu Leu Leu
His Ile Ser Tyr Val Ala Asn Tyr Pro Asn Gly Lys Val Thr Gln
                 20
                                     25
Ser Cys His Gly Met Ile Pro Glu His Gly His Ser Pro Gln Ser
                 35
                                      40
Val Pro Val His Asp Ile Tyr Val Ser Gln Met Thr Phe Arg Pro
                 50
                                     55
Gly Asp Gln Ile Glu Val Thr Leu Ser Gly His Pro Phe Lys Gly
Phe Leu Leu Glu Ala Arg Asn Ala Glu Asp Leu Asn Gly Pro Pro
                 80
                                     85
Ile Gly Ser Phe Thr Leu Ile Asp Ser Glu Val Ser Gln Leu Leu
                 95
                                     100
Thr Cys Glu Asp Ile Gln Gly Ser Ala Val Ser His Arg Ser Ala
```

```
115
Ser Lys Lys Thr Glu Ile Lys Val Tyr Trp Asn Ala Pro Ser Ser
                125
                                     130
Ala Pro Asn His Thr Gln Phe Leu Val Thr Val Val Glu Lys Tyr
                140
                                     145
                                                          150
Lys Ile Tyr Trp Val Lys Ile Pro Gly Pro Ile Ile Ser Gln Pro
                155
                                     160
Asn Ala Phe Pro Phe Thr Thr Pro Lys Ala Thr Val Val Pro Leu
                170
                                     175
Pro Thr Leu Pro Pro Val Ser His Leu Thr Lys Pro Phe Ser Ala
                185
                                     190
                                                         195
Ser Asp Cys Gly Asn Lys Lys Phe Cys Ile Arg Ser Pro Leu Asn
                200
                                     205
                                                         210
Cys Asp Pro Glu Lys Glu Ala Ser Cys Val Phe Leu Ser Phe Thr
                215
                                     220
                                                         225
Arg Asp Asp Gln Ser Val Met Val Glu Met Ser Gly Pro Ser Lys
                230
                                     235
Gly Tyr Leu Ser Phe Ala Leu Ser His Asp Gln Trp Met Gly Asp
                245
                                     250
                                                          255
Asp Asp Ala Tyr Leu Cys Ile His Glu Asp Gln Thr Val Tyr Ile
                260
                                     265
                                                         270
Gln Pro Ser His Leu Thr Gly Arg Ser His Pro Val Met Asp Ser
                275
                                     280
                                                         285
Arg Val Gly Thr Leu Glu Asp Met Ala Trp Arg Leu Ala Asp Gly
                290
                                     295
                                                         300
Val Met Gln Cys Ser Phe Arg Arg Asn Ile Thr Leu Pro Gly Val
                305
                                     310
                                                         315
Lys Asn Arg Phe Asp Leu Asn Thr Ser Tyr Tyr Ile Phe Leu Ala
                320
                                     325
                                                         330
Asp Gly Ala Ala Asn Asp Gly Arg Ile Tyr Lys His Ser Gln Gln
                335
                                     340
                                                         345
Pro Leu Ile Thr Tyr Glu Lys Tyr Asp Val Thr Asp Ser Pro Lys
                350
                                     355
                                                         360
Asn Ile Gly Gly Ser His Ser Val Leu Leu Leu Lys Val His Gly
                365
                                     370
                                                         375
Ala Ser Asp Ala His Val His His Asn Cys Pro His Leu His Cys
                380
                                     385
                                                         390
Phe Cys Tyr Ala Val Tyr Ile Gln Gly Arg Leu Glu
                395
                                     400
<210> 72
<211> 363
<212> PRT
<213> Homo sapiens
<221> misc_feature
<223> Incyte ID No: 7501932CD1
<400> 72
Met Ala Gln Gly Pro Gly His Pro Glu Ala Pro Pro Val Pro Ala
Gln Asn Ser Ala Cys Ile Leu Ala Ser Trp Val Ser Gly Lys Phe
Ser Ser Leu Glu Ala Leu Glu Ile Gln His Thr Thr Ala Leu
                 35
                                      40
Arg Ser Ile Glu Val Ala Lys Thr Gln Ala Leu Ala Gln Ala Arg
                 50
                                                          60
Asp Glu Glu Gln Arg Leu Arg Val His Leu Glu Ala Val Ala Arg
                 65
                                      70
His Gly Cys Arg Ile Arg Glu Leu Leu Glu Gln Val Asp Glu Gln
                 80
Thr Phe Leu Gln Glu Ser Gln Leu Leu Gln Pro Pro Gly Pro Leu
                 95
                                     100
                                                         105
Gly Pro Leu Thr Pro Leu Gln Trp Asp Glu Asp Gln Gln Leu Gly
                110
                                     115
Asp Leu Lys Gln Leu Leu Ser Arg Leu Cys Gly Leu Leu Leu Glu
```

```
130
Glu Gly Ser His Pro Gly Ala Pro Ala Lys Pro Val Asp Leu Ala
                140
                                     145
Pro Val Glu Ala Pro Gly Pro Leu Ala Pro Val Pro Ser Thr Val
                155
                                     160
                                                         165
Cys Pro Leu Arg Arg Lys Leu Trp Gln Asn Tyr Arg Asn Leu Thr
                170
                                     175
Phe Asp Pro Val Ser Ala Asn Arg His Phe Tyr Leu Ser Arg Gln
                185
                                     190
Asp Gln Gln Val Lys His Cys Arg Gln Ser Arg Gly Pro Gly Gly
                200
                                     205
Pro Gly Ser Phe Glu Leu Trp Gln Val Gln Cys Ala Gln Ser Phe
                215
                                     220
                                                         225
Gln Ala Gly His His Tyr Trp Glu Val Arg Ala Ser Asp His Ser
                230
Val Thr Leu Gly Val Ser Tyr Pro Gln Leu Pro Arg Cys Arg Leu
                245
                                    250
Gly Pro His Thr Asp Asn Ile Gly Arg Gly Pro Cys Ser Trp Gly
                260
                                     265
Leu Cys Val Gln Glu Asp Ser Leu Gln Ala Trp His Asn Gly Glu
                275
                                    280
Ala Gln Arg Leu Pro Gly Val Ser Gly Arg Leu Leu Gly Met Asp
                290
Leu Asp Leu Ala Ser Gly Cys Leu Thr Phe Tyr Ser Leu Glu Pro
                305
                                    310
Gln Thr Gln Pro Leu Tyr Thr Phe His Ala Leu Phe Asn Gln Pro
                320
                                    325
Leu Thr Pro Val Phe Trp Leu Leu Glu Gly Arg Thr Leu Thr Leu
                335
                                    340
Cys His Gln Pro Gly Ala Val Phe Pro Pro Gly Pro Gln Glu Glu
                350
                                    355
Val Leu Ser
<210> 73
<211> 221
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501111CD1
<400> 73
Met Lys Val Gly Val Leu Trp Leu Ile Ser Phe Phe Thr Phe Thr
Asp Gly His Gly Gly Phe Leu Gly Lys Asn Asp Gly Ile Lys Thr
                 20
                                     25
Lys Lys Glu Leu Ile Val Asn Lys Lys His Leu Gly Pro Val
                 35
Glu Glu Tyr Gln Leu Leu Gln Val Thr Tyr Arg Asp Ser Lys
                 50
                                     55
Glu Lys Arg Asp Leu Arg Asn Phe Leu Lys Leu Leu Lys Pro Pro
Leu Leu Trp Ser His Gly Leu Ile Arg Ile Ile Arg Ala Lys Ala
                 80
                                     85
Thr Thr Asp Cys Asn Ser Leu Asn Gly Val Leu Gln Cys Thr Cys
                 95
                                    100
                                                         105
```

Glu Asp Ser Tyr Thr Trp Phe Pro Pro Ser Cys Leu Asp Pro Gln

Asn Cys Tyr Leu His Thr Ala Gly Ala Leu Pro Ser Cys Glu Cys

His Leu Asn Asn Leu Ser Gln Ser Val Asn Phe Cys Glu Arg Thr

Lys Ile Trp Gly Thr Phe Lys Ile Asn Glu Arg Phe Thr Asn Asp

Leu Leu Asn Ser Ser Ser Ala Ile Tyr Ser Lys Tyr Ala Asn Gly

110

125

140

155

115

130

145

160

120

135

180

```
Ile Glu Ile Gln Leu Lys Lys Ala Tyr Glu Arg Ile Gln Gly Phe
                 185
                                     190
Glu Ser Val Gln Val Thr Gln Phe Arg Asn Ala Val Leu Pro
                                                          Leu
                 200
                                      205
Ala Glu Thr Gln Ser Trp Ser His Pro Val Leu
                 215
                                      220
<210> 74
<211> 267
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501113CD1
<400> 74
Met Lys Val Gly Val Leu Trp Leu Ile Ser Phe Phe Thr Phe Thr
Asp Gly His Gly Gly Phe Leu Gly Lys Asn Asp Gly Ile Lys Thr
Lys Lys Glu Leu Ile Val Asn Lys Lys His Leu Gly Pro Val
                  35
Glu Glu Tyr Gln Leu Leu Gln Val Thr Tyr Arg Asp Ser Lys
                  50
                                      55
Glu Lys Arg Asp Leu Arg Asn Phe Leu Lys Leu Leu Lys Pro Pro
                  65
                                      70
Leu Leu Trp Ser His Gly Leu Ile Arg Ile Ile Arg Ala Lys Ala
                                                           90
Thr Thr Asp Cys Asn Ser Leu Asn Gly Val Leu Gln Cys Thr Cys
                  95
                                     100
                                                          105
Glu Asp Ser Tyr Thr Trp Phe Pro Pro Ser Cys Leu Asp Pro Gln
                 110
                                     115
                                                          120
Asn Cys Tyr Leu His Thr Ala Gly Ala Leu Pro Ser Cys Glu Cys
                125
                                     130
His Leu Asn Asn Leu Ser Gln Ser Val Asn Phe Cys Glu Arg Thr
                 140
                                     145
                                                          150
Lys Ile Trp Gly Thr Phe Lys Ile Asn Glu Arg Phe Thr Asn Asp
                155
                                     160
                                                          165
Leu Leu Asn Ser Ser Ser Ala Ile Tyr Ser Lys Tyr Ala Asn Gly
                 170
                                     175
                                                          180
Ile Glu Ile Gln Leu Lys Lys Ala Tyr Glu Arg Ile Gln Gly Phe
                185
                                     190
                                                          195
Glu Ser Val Gln Val Thr Gln Phe Arg Asn Gly Ser Ile Val Ala
                                     205
                                                          210
Gly Tyr Glu Val Val Gly Ser Ser Ser Ala Ser Glu Leu Leu Ser
                215
                                     220
                                                          225
Ala Ile Glu His Val Ala Glu Lys Ala Lys Thr Ala Leu His Lys
                230
                                     235
                                                          240
Leu Phe Pro Leu Glu Asp Gly Ser Phe Arg Val Phe Gly Lys Gly
                245
                                     250
                                                          255
Ile Phe Tyr Leu Met Leu Trp Asn Thr Leu Gly Gln
                260
<210> 75
<211> 236
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501118CD1
Met Lys Val Gly Val Leu Trp Leu Ile Ser Phe Phe Thr Phe Thr
```

```
WO 03/016506
Asp Gly His Gly Gly Phe Leu Gly Lys Asn Asp Gly Ile Lys Thr
                 20
Lys Lys Glu Leu Ile Val Asn Lys Lys His Leu Gly Pro Val
Glu Glu Tyr Gln Leu Leu Gln Val Thr Tyr Arg Asp Ser Lys
Glu Lys Arg Asp Leu Arg Asn Phe Leu Lys Leu Leu Lys Pro Pro
                 65
Leu Leu Trp Ser His Gly Leu Ile Arg Ile Ile Arg Ala Lys Ala
                 80
                                     85
Thr Thr Asp Cys Asn Ser Leu Asn Gly Val Leu Gln Cys Thr Cys
                                    100
                                                         105
                 95
Glu Asp Ser Tyr Thr Trp Phe Pro Pro Ser Cys Leu Asp Pro Gln
                110
                                    115
                                                         120
Asn Cys Tyr Leu His Thr Ala Gly Ala Leu Pro Ser Cys Glu Cys
                125
                                    130
                                                         135
His Leu Asn Asn Leu Ser Gln Ser Val Asn Phe Cys Glu Arg Thr
                140
                                    145
                                                         150
Lys Ile Trp Gly Thr Phe Lys Ile Asn Glu Arg Phe Thr Asn Asp
                155
                                    160
                                                         165
Leu Leu Asn Ser Ser Ser Ala Ile Tyr Ser Lys Tyr Ala Asn Gly
                170
                                    175
                                                         180
Ile Glu Ile Gln Pro Ser Val Met Thr Leu Ser Leu Asp Leu Gly
                185
                                    190
                                                         195
Pro Arg Met Met Asn Ile Pro Cys Pro Ala Ala Val Ala Thr Gly
                200
                                    205
                                                         210
Glu Thr Ser Gln Pro Ser Val Ser Pro Leu Gly Gly Arg Ser Ser
                215
                                    220
                                                         225
Gly Arg Leu Val Cys Ser Leu Cys Leu Lys Asn
                230
                                    235
<210> 76
<211> 221
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501128CD1
<400> 76
Met Lys Val Gly Val Leu Trp Leu Ile Ser Phe Phe Thr Phe Thr
Asp Gly His Gly Gly Phe Leu Gly Lys Asn Asp Gly Ile Lys Thr
                 20
                                     25
Lys Lys Glu Leu Ile Val Asn Lys Lys Lys His Leu Gly Pro Phe
Glu Glu Tyr Gln Leu Leu Gln Val Thr Tyr Arg Asp Ser Lys
                 50
                                     55
                                                          60
Glu Lys Arg Asp Leu Arg Asn Phe Leu Lys Leu Lys Pro Pro
                 65
                                     70
Leu Leu Trp Ser His Gly Leu Ile Arg Ile Ile Arg Ala Lys Ala
```

Thr Thr Asp Cys Asn Ser Leu Asn Gly Val Leu Gln Cys Thr Cys Glu Asp Ser Tyr Thr Trp Phe Pro Pro Ser Cys Leu Asp Pro Gln Asn Cys Tyr Leu His Thr Ala Gly Ala Leu Pro Ser Cys Glu Cys His Leu Asn Asn Leu Ser Gln Ser Val Asn Phe Cys Glu Arg Thr Lys Ile Trp Gly Thr Phe Lys Ile Asn Glu Arg Phe Thr Asn Asp Leu Leu Asn Ser Ser Ser Ala Ile Tyr Ser Lys Tyr Ala Asn Gly Ile Glu Ile Gln Leu Lys Lys Ala Tyr Glu Arg Ile Gln Gly Phe

Glu Ser Val Gln Val Thr Gln Phe Arg Asn Ala Val Leu Pro Leu 200 205 Ala Glu Thr Gln Ser Trp Ser His Pro Val Leu 215 <210> 77 <211> 410 <212> PRT <213> Homo sapiens <220> <221> misc_feature <223> Incyte ID No: 7501920CD1 <400> 77

Met Lys Val Gly Val Leu Trp Leu Ile Ser Phe Phe Thr Phe Thr 1 Asp Gly His Gly Gly Phe Leu Gly Gly Pro Val Glu Glu Tyr Gln Leu Leu Gln Val Thr Tyr Arg Asp Ser Lys Glu Lys Arg Asp 35 40 Leu Arg Asn Phe Leu Lys Leu Leu Lys Pro Pro Leu Leu Trp Ser His Gly Leu Ile Arg Ile Ile Arg Ala Lys Ala Thr Thr Asp Cys 65 70 75 Asn Ser Leu Asn Gly Val Leu Gln Cys Thr Cys Glu Asp Ser Tyr 80 85 Thr Trp Phe Pro Pro Ser Cys Leu Asp Pro Gln Asn Cys Tyr Leu 95 100 His Thr Ala Gly Ala Leu Pro Ser Cys Glu Cys His Leu Asn Asn 110 120 Leu Ser Gln Ser Val Asn Phe Cys Glu Arg Thr Lys Ile Trp Gly 125 130 135 Thr Phe Lys Ile Asn Glu Arg Phe Thr Asn Asp Leu Leu Asn Ser 140 145 150 Ser Ser Ala Ile Tyr Ser Lys Tyr Ala Asn Gly Ile Glu Ile Gln 155 160 165 Leu Lys Lys Ala Tyr Glu Arg Ile Gln Gly Phe Glu Ser Val Gln 170 180 Val Thr Gln Phe Arg Asn Gly Ser Ile Val Ala Gly Tyr Glu Val 185 190 195 Val Gly Ser Ser Ser Ala Ser Glu Leu Leu Ser Ala Ile Glu His 200 205 Val Ala Glu Lys Ala Lys Thr Ala Leu His Lys Leu Phe Pro Leu 215 220 Glu Asp Gly Ser Phe Arg Val Phe Gly Lys Ala Gln Cys Asn Asp 230 235 Ile Val Phe Gly Phe Gly Ser Lys Asp Asp Glu Tyr Thr Leu Pro 245 250 Cys Ser Ser Gly Tyr Arg Gly Asn Ile Thr Ala Lys Cys Glu Ser 260 265 Ser Gly Trp Gln Val Ile Arg Glu Thr Cys Val Leu Ser Leu Leu 275 280 Glu Glu Leu Asn Lys Asn Phe Ser Met Ile Val Gly Asn Ala Thr 290 295 Glu Ala Ala Val Ser Ser Phe Val Gln Asn Leu Ser Val Ile Ile 305 310 Arg Gln Asn Pro Ser Thr Thr Val Gly Asn Leu Ala Ser Val Val 320 325 Ser Ile Leu Ser Asn Ile Ser Ser Leu Ser Leu Ala Ser His Phe 335 340 345 Arg Val Ser Asn Ser Thr Met Glu Asp Val Ile Ser Ile Ala Asp 350 355 Asn Ile Leu Asn Ser Ala Ser Ala Asn Gln Leu Asp Ser Leu Thr 365 370 Ala Gly Arg Lys Val Cys Gln Leu Thr Val Thr Arg Asp Ile Arg 380

```
Lys His Gln His Ser Gly Ala Ser Asp Ser Ser Ser Glu Phe
                 395
                                     400
Phe Ser Glu Ile His
<210> 78
<211> 67
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7510325CD1
<400> 78
Met Gln Met Glu Leu Lys Phe Asn Leu Lys Lys His Met Lys Glu
                                      10
Phe Lys Val Leu Ser Arg Phe Arg Ser Pro Asn Phe Glu Met Glu
                  20
Ala Ser Leu Leu Gly Met Lys Leu Leu Ala Pro Ala Val His Leu
                  35
                                      40
                                                           45
Asn Cys Cys Gln Pro Leu Asn Met Leu Pro Arg Arg Leu Arg Gln
Pro Phe Thr Ser Cys Phe His
                  65
<210> 79
<211> 49
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7510966CD1
·<400> 79
Met Gln Met Glu Leu Lys Phe Asn Leu Lys Lys His Met Lys Glu
                                      10
Phe Lys Val Leu Ser Arg Phe Arg Ser Pro Asn Phe Ala Met Leu
                  20
                                      25
                                                           30
Ser Phe His Leu Gln Arg Pro Asn Pro Gly Ala Ile Leu Cys Tyr
                                      40
Asn Phe Phe Tyr
<210> 80
<211> 495
<212> PRT
<213'> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7386101CD1
<400> 80
Met Ala Ala Gln Leu Leu Glu Glu Lys Leu Thr Cys Ala Ile Cys
                                      10
Leu Gly Leu Tyr Gln Asp Pro Val Thr Leu Pro Cys Gly His Asn
                  20
                                      25
                                                          30
Phe Cys Gly Ala Cys Ile Arg Asp Trp Trp Asp Arg Cys Gly Lys
                  35
                                      40
Ala Cys Pro Glu Cys Arg Glu Pro Phe Pro Asp Gly Ala Glu Leu
                  50
                                      55
Arg Arg Asn Val Ala Leu Ser Gly Val Leu Glu Val Val Arg Ala
                  65
                                      70
                                                          75
Gly Pro Ala Arg Asp Pro Gly Pro Asp Pro Gly Pro Gly Pro Asp
                  80
                                      85
```

```
Pro Ala Ala Arg Cys Pro Arg His Gly Arg Pro Leu Glu Leu Phe
                                     100
Cys Arg Thr Glu Gly Arg Cys Val Cys Ser Val Cys Thr Val Arg
                110
                                     115
Glu Cys Arg Leu His Glu Arg Ala Leu Leu Asp Ala Glu Arg Leu
                125
                                     130
Lys Arg Glu Ala Gln Leu Arg Ala Ser Leu Glu Val Thr Gln Gln
                140
                                     145
Gln Ala Thr Gln Ala Glu Gly Gln Leu Leu Glu Leu Arg Lys Gln
                155
                                     160
                                                          165
Ser Ser Gln Ile Gln Asn Ser Ala Cys Ile Leu Ala Ser Trp Val
                                     175
                170
                                                          180
Ser Gly Lys Phe Ser Ser Leu Leu Gln Ala Leu Glu Ile Gln His
                185
                                     190
Thr Thr Ala Leu Arg Ser Ile Glu Val Ala Lys Thr Gln Ala Leu
                200
                                     205
                                                          210
Ala Gln Ala Arg Asp Glu Glu Gln Arg Leu Arg Val His Leu Glu
                215
                                     220
                                                          225
Ala Val Ala Arg His Gly Cys Arg Ile Arg Glu Leu Leu Glu Gln
                                     235
                230
                                                          240
Val Asp Glu Gln Thr Phe Leu Gln Glu Ser Gln Leu Leu Gln Pro
                245
                                     250
                                                          255
Pro Gly Pro Leu Gly Pro Leu Thr Pro Leu Gln Trp Asp Glu Asp
                260
                                     265
                                                          270
Gln Gln Leu Gly Asp Leu Lys Gln Leu Leu Ser Arg Leu Cys Gly
                275
                                     280
                                                          285
Leu Leu Glu Glu Gly Ser His Pro Gly Ala Pro Ala Lys Pro
                290
                                     295
                                                          300
Val Asp Leu Ala Pro Val Asp Tyr Arg Asn Leu Thr Phe Asp Pro
                                                          315
                305
                                     310
Val Ser Ala Asn Arg His Phe Tyr Leu Ser Arg Gln Asp Gln Gln
                                     325
                320
                                                          330
Val Lys His Cys Arg Gln Ser Arg Gly Pro Gly Gly Pro Gly Ser
                335
                                     340
                                                          345
Phe Glu Leu Trp Gln Val Gln Cys Ala Gln Ser Phe Gln Ala Gly
                350
                                     355
                                                          360
His His Tyr Trp Glu Val Arg Ala Ser Asp His Ser Val Thr Leu
                                     370
                                                          375
                365
Gly Val Ser Tyr Pro Gln Leu Pro Arg Cys Arg Leu Gly Pro His
                380
                                     385
                                                          390
Thr Asp Asn Ile Gly Arg Gly Pro Cys Ser Trp Gly Leu Cys Val
                395
                                     400
                                                          405
Gln Glu Asp Ser Leu Gln Ala Trp His Asn Gly Glu Ala Gln Arg
                410
                                     415
                                                          420
Leu Pro Gly Val Ser Gly Arg Leu Leu Gly Met Asp Leu Asp Leu
                                     430
                425
                                                          435
Ala Ser Gly Cys Leu Thr Phe Tyr Ser Leu Glu Pro Gln Thr Gln
                440
                                     445
Pro Leu Tyr Thr Phe His Ala Leu Phe Asn Gln Pro Leu Thr Pro
                455
                                     460
                                                          465
Val Phe Trp Leu Leu Glu Gly Arg Thr Leu Thr Leu Cys His Gln
                470
                                     475
Pro Gly Ala Val Phe Pro Leu Gly Pro Gln Glu Glu Val Leu Ser
                                                          495
```

```
<210> 81
<211> 1146
<212> DNA
```

<220>

<221> misc_feature

<223> Incyte ID No: 1417062CB1

<400> 81

gcgcaagaag gtgcctgcgg gactggagca gagcgggctg cgagggtctt cccagcgcag 60

<213> Homo sapiens

```
gcgggttttc cagtgttact tgcggctggg cgtgggggac tagctgcctt tctggcagca 120
ggcaggaagc cgcaaaaagt ttctgagccc ccgaacctgt agcggacgtg gaaaaagaac 180
gcccctcctc aagtgtctgg ctgaaagatg ccacccaggg aagggaactc gggctagcta 240
aggaggccat tettgatgtt gettetagat eteatgteat cacegagece teagetgetg 300
gtggcagctg ctcagcagac ccttggcatg ggaaagagac ggagtccacc ccaagccatc 360
tgccttcact tagctggaga ggtgctggct gtggcccggg gactgaagcc agctgtgctc 420
tatgattgca actgtgcagg ggcatcagag ctccagagct atctggagga gctgaagggg 480 cttggcttcc tgacttttgg acttcacatc cttgagattg gagaaaacag cctgattgtc 540
agtectgage atgtatgtca geacttggag caggtgetge ttggtaceat ageetttgtg 600
gatgtttcca getgccageg teaccettet gtetgetece tggaccaget teaggacttg 660
aaggeeeteg tggetgagat cateacacat ttgeagggge tgeagaggga ettateteta 720
gcagtetect acagcagget ccattectea gactggaate tgtgtactgt atttgggate 780
ctcctgggct atcctgttcc ctataccttt cacctgaacc agggagatga caactgctta 840
getetgacte cactaegagt atteactgee eggateteat ggttgetagg teaaccecca 900
atcctgctct attcttttag tgtcccagag agtttgttcc caggcctgag ggacattcta 960
aacacctggg agaaggacct cagaacccga tttaggactc agaatgactt tgctgatctc 1020
agcatctcct ctgagatagt cacactgccg gctgtggccc tctgacttta actctcctcc 1080
catatagaag gtactcagta aatgatcatc tctaggttgg ggatggcaaa taatcatctc 1140
aactgc
                                                                    1146
<210> 82
<211> 1043
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2007701CB1
<400> 82
aagaattegg cacgaggttt aacettgact ttecacagte etgaggttee caaaataaag 60
gggaaccgga aataccaaag gattatctcc aatattccag ggccttcttt ctcatctctg 120
tetttaccat acttactggc cttggctggc tettcagetc ttggateett aatcgaggaa 180
gcatgaccac caacttggat ctgaaggtat ccatgctcag cttcatctca gctacctgct 240
tgctcctctg cctcaacctg tttgtggcac aggttcactg gcatactagg gatgccatgg 300
agtcagatct cetatggacc tattatetta actggtgcag tgacatettt tacatgtttg 360
ctgggatcat ctctcttctc aactacttaa cttccagatc gcctgcctgt gatgaaacg 420
tcactgtgat tccaacagag agatcaaggc tgggggttgg tccggtgact acagtatcac 480
ctgctaaaga tgaagggcca aggtctgaga tggaatctct aagtgtgaga gagaaaaatt 540
taccaaagtc aggactgtgg tggtgatagg aaaacctaac tatagcttgt cttaaaagca 600
ggggagaagc tgagttggga atggtcacat aaattctggg aaactctcct aatatcatgt 660
ccatattact tgaggagaca gcattaaagc tgatgaaatg tcttttgcgt gcattggatc 720
caaaatatat atgatagtca taaagtaaat aactcactta agaaaaacat ttctaaaaga 780
aaacaacaat gtttagagtc atgaatgaaa gaaactagtg aaagatgcag tgtgtagacc 840
agagacctct ttgggtatca gggatctcat ggaccagaat ggcccgtgga gaagaatgtt 900
aattacttet gtttggaatt ttetttatta tgtgtggett tgggtatact caggatggaa 960
agcacttgga caaatactgt tgaatctgaa cttaatagca ttaccagaaa tggaataaat 1020
atcaatggat ataagaccta aaa
                                                                    1043
<210> 83
<211> 1684
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2915695CB1
ccttttttt ttttttctc agttcatcaa ttttttttt ttttaaagat aaattttctt 60
ttacattgac atggggtctc actatgttgc ccagggtggt ctcaaactcc tgggctcaag 120
caatcetece acettggeet egeaaagtge taggattaca agggtgagee ateteacetg 180
gcctgttcat caatgtgtat agtatttaat tacattatga attacaataa cacatacaac 240
gggcatagac acacttgata ttaaatcaca atggactctg ggtaagcaag ggcttagctg 300
gggaagtgga actgcacagc attctagaaa gtgctcactg cctgggtttg attcccagct 360
tototacata ctagttatgt gacctgggaa ttcagattac tgaagctttg tgccttattt 420
tcctcatttg cgaaagggga taatagcacc tcatatattt gttgtgagga ttagaggaga 480
```

```
atacacttgt gaagcaccta gaatagggtg gggcatgagc taagcaccta gaatagggtg 540
gggcatgagc taagcaccta gaatagggtg gggcatgagc taagcaccta gaatagggtg 600
gggcctgagc taagcaccta gaatagggtg gggcatgagc taagtacttg ggaaatgtta 660
catatcacat cactettect gtggctgctg gcaggagetg tectacagge tacaggecac 720
agcctaggcc tgcgcccagc atcccctgtg tttcacagag aagtaaggtg cattggttgg 780
gtaagatgcc tettetgtag tattatatee teatttetea tgtgcaaaaa tggacgtetg 840
gagacagtca gtgactccaa agctacttga ccacgaagtc agtttttaga actgccaggc 900
ccctagcaat cgtaagattt ggattcagaa agacagggaa tttgccatcc attttccttt 960
tttcttttac ctactgagtc caaaaatccc aaggaggaac aaacagaacc tctcagggcc 1020
gagcctgcaa agcccttggc cagcctcctc aggagtccac tggctgcact gtgttccaca 1080 tccctgcagg gctgagcaac tgggaagagg cttggtcccc aggaccccct agtgtgtgcg 1140
tgttggacag gtgcttcagg gatgagggct gaggctggca gggggaggtc acacaatagt 1200
gcagatgccc gactccatgg gtctcctctg gcggctcctg ctgaggcttt ccctgggcca 1260
cctggatgac ctattggctt gagggccatt gggtaccaag atgctagggt actccgctct 1320
gggagggcct ggacctacaa atggaagatg ggccctgggt cctggaccta gatggaggct 1380
ttgccgagga ctgtccctct gcagggcgtg tgcttggtaa acgtggggca actagaagct 1440
agatggtgcg aatgattcac tgtgcctgga aggaaacaca ctgaaaagga gacatcggta 1500
aattcaggtc agctcaacaa gtagcaaaga actctgctcc ctgagttgca agtctttgtg 1560
ggagatgcta ttgagtagtg agctggggtt taccaacagc acccagcgct gtgttgggca 1620
cagagtaggc tttcagcaaa accctggggt ccaagatgca aagttctaga agttaggaaa 1680
<210> 84
<211> 1584
<212> DNA
<213> Homo sapiens
<221> misc_feature
<223> Incyte ID No: 2969449CB1
tttagccagg atggtctgga tctcctgacc tcgtgatcca cccgcctagg cctcccaaag 60
tgctgggatt acaggtgtaa gccaccacgc ccggccctga ggctctctta aacagtgctt 120
agggtccaac gtctatgggt caaacctcag ctccctcaat gtggagcaca gtgacttaat 180
ttccccaact gtcagactca tgcacctgta gggggatgaa accaaaggga cccacctcat 240
caggagaatg aaatgggaca geceettage ttagteeetg geagetggea ageactgtet 300
aagtgttccc ttttattatc atatttaagt acaggataga gggggatttc tcagcctcag 360
cactactgac atgttgggtg agatcatttt tcatggggtg tggaggcctg tcctgtgcat 420
agcaggatgg gcagcagcat ccctgacctc tgcccactcc ctccctcca ggctatgaca 480
gccaacagtg tetecataca ttgccaaatg teeettggag eccaaatgee ecagttaaga 540
aacattgata cgcaacagcc agatctctat tgcctatgag tctaaatgac ttacaattct 600
atcatcctgt gacttcccgt aggcacaatg tggcatgtcc aagaattcta agtgccgctt 660
ctatcaaact ageteeteet gtgtteecae tteggtgtee acagetaggt geecaaggea 720
ggatgttggg ageceetgg actetteete teetteacet ttacaetgae eecagtetee 780
ctggtgggcc catccgttct caggcgttaa atgctgtcct cgtgctgaga catccagatt 840
cactgeteec etgaceteea gacetgeggg aagtecacet eccatetgee tacaccetet 900
getetcaggt gagggeaact ccatcttctg gttactcaag ttgaaaccgg acacatcctt 960
getecaetet eteteaecte teetateeat teeteteage aaattetagt agetteteet 1020
tcagaacata gctgcaatct ggtcacttct cactgctcac ctggtctggg ccaccaccac 1080 tcctcatcta gagtgctgta cagtctccag gctccttcct ttatcccgac aatctattct 1140
cagttgagca gccacagaga cctggtagag gcctgaacca gctcccaac ccctgctcaa 1200
catececcag caggececte ttggcaaagg cetegeagtg ageetgaagg ceeetcacec 1260
ctactcctgc gacgtcatct ctggctcccc tcccctttgc ttttgccagt tctcaagcac 1320
acceggeatg etectgette acggtttttg gacetgetgt tecettgete etgetgtgge 1380
ccagaaagct gtccttgcag cactggccc cttcaggtct ttcttcagat attaccttct 1440
tggggaatct ttcctgacca ccctatttaa ggctcaccat gcatcaccca ccacacccca 1500
tgttccttct tggcctgaat tttttcatag cactgattgc aatcaataca ctctgtatgt 1560
attttatgtg tttacatgac atgc
<210> 85
<211> 1490
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<223> Incyte ID No: 2994102CB1

```
gtttcagggg acaaacatcc agatgatagc aatgcctcgg ggagcttcct cactctgtcc 60
tetgtetgee tttcagetgt gagaggaact geaggeeagt taatgceage aaagacatte 120
tgctcagggt caccatgggg gaggactete cagtggetat gttcagetgg tatttggaca 180
acaccccaac agagcaggct gagcccctcc cggatgcctg Cagactcaga ggattttggc 240
caaggteett aacceteete cagageaaca cetecaegtt getgttgaac agetegttte 300
tgcagtcccg gggagaggtc atccgaatca gagccacagc actgaccagg catgcctatg 360
gggaggacac ctatgtgatc agcactgtgc ctccccgtga ggtgcctgcc tgcactattg 420 ccccagagga gggcaccgtt ctgacgagct ttgccatctt ctgcaacgcc tccacagccc 480
tgggacccct ggagttctgc ttctgtctgg aatcaggttc ctgcctacac tgtggccctg 540
aacctgccct cccatcagtg tatctgccac ttggagagga gaacaatgac tttgtgctga 600
cagtagttat ttctgccacc aatcgtgcag gggacacgca gcagacccag gccatggcta 660
aggtggcact cggagacaca tgtgttgagg atgtagcatt ccaggctgcc gtgtcagaga 720
aaatccccac agctctgcaa ggcgagggtg gccccgagca gctcctccag ctggccaagg 780
ctgtgtcctc catgctgaac caagagcatg aaagccaggg ctcaggacag tcactgagca 840
tagacgtcag acagaaggtc agagagcatg tgctgggatc actgtctgca gtcaccaccg 900 gcttggagga cgtgcagagg gtgcaggagc tggccgaggt gctgagagag gtgacctgcc 960 ggagtaagga actcacaccc tcggcccagg ggtcctgcat gggcgattca tgggaaggtg 1020
eccetectge tgeccatgta teteacgeta ggtgagaggg cetgtttgee cagactetea 1080
etectgeate tgetggtgag caagttgagg gagtaactga ateteattaa tatttgggtg 1140
gccaaatgtg agtccagaca ctgctactga ctgcccatgt tctcaacttc agtacatgcc 1200
agcctgacat ctggctgcca gctcctgtgc ttccttatcc ttctgggggt cttctctgac 1260
cctcagagcc tactgtacct gcccatatgg ctgtgaattc atgcagtgtt cagtgactaa 1320
tgaagetgge ttataaacac cecagetace teacecetet tgatggataa teccaageag 1380
gagtgaatcc caggtaatgg gcttgatcac actcctgtac tggcttccac ccttccctgt 1440
ctcacacccc ctactcccca caagtgtttc ttgggatcat gtccaaataa
                                                                          1490
<210> 86
<211> 1418
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<223> Incyte ID No: 3410251CB1
caggaacggg ctccgcggac gacgggctcc aggcacgcac aggcagcggg cctcccaccg 60
cgggtgccgg gggcgggggg gctgccccca tgcggggccc ttcctggttg cggcctcggc 120
cgctgctgct gctgttgctg ctgctgtcgc cttggcctgt ctgggcccat gtgtcggcca 180 cggcctcgcc ctcggggtcc ctgggcgccc cggactgccc cgaggtgtgc acgtgcgtgc 240
cgggaggcct ggccagctgc tcggcactct cgctgcccgc cgtgcccccg ggcctgagcc 300
tgcgcctgcg cgcgctgctg ctggaccaca accgcgtccg tgcgctgccg ccaggtgcct 360
tegegggage gggcgcgcta cagegeetgg acetgegega gaaegggetg caeteggtge 420
atgtgcgagc cttctggggc ctgggcgcgc tgcagctgct ggacctgagc gccaaccagc 480
tggaagcact ggcaccaggg gctttcgcgc cgctgcgcgc gctgcgcaac ctctcattgg 540
eeggeaaceg getggegege etggageeeg eggegetagg egegeteeeg etgetgeget 600
cacteagect geaggacaac gagetgegg cactegege ggggetgetg ggeegeetge 660
ccgctctaga cgcgctgcac ctgcgcggca acccttgggg ctgcgggtgc gcgctgcgcc 720
egetetgege etggetgege eggeaceege tgeeegegte agaggeegag aeggtgetet 780
gegtgtggcc gggacgcctg aegetcagec cectgactgc etttteegac geegeettta 840
gccattgcgc gcagccgctc gccctgcggg acctggccgt ggtttacacg ctcgggccgg 900 cctccttcct cgtcagcctg gcttcctgcc tggcgctggg ctctgggctc accgcctgcc 960
gtgcgcgccg ccgccgcctc cgcaccgccg ccctccgccc gccgagaccg ccagacccga 1020
accorgated egacececae ggetgtgeet egecegegga coeggggage ecegeegetg 1080
ccgcccaagc ctgagcggcc gcggccgcct ggagcgctcg aagcttcccc catgcctttg 1140
ccctcccttt acactgtctg ccggcgtcaa caagcgacac agaccgaaat ataaatatga 1200
aaaacttgag ttttctgttc tgttattttc taagttttta aaccttttca tttgctatta 1260
aaattgtgct ttccattaat taaattcttt ggaaccaaac ttggatttac ctctttccac 1320
tggtggccca cccaacttct tccaccccat gttttcctta acccatggca ggtctttcct 1380
tccctggccg cccgtagtta gacgcatggg atggcccg
                                                                          1418
<210> 87
```

<211> 3485 <212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 5330327CB1

gccccgcctg ctgggggcca gcatggaatt ccccccggca gagctgggag tgacactgac 60 aagcaatcgg ccgcgtccag agcagcaggc ggcatccggg gggagcgggg ccggctgggg 120 ggccccagga gggcttcctg gaaccccagc tccatggccg cctgcaccct gacacaggcc 180 agataagagt cccggctgca ttatcagagc ccggcagggc accggcctcc ctgcaccaga 240 aggaagactc ggggcgcagc aggtcctcaa ggcgatcttc ccagagagcg ggaccagcgg 300 ctggtggcca gtgtggatgg aatttgcaga gccctagctc gagtccggga gtcccgggcc 360 agatgggagc agacgcttgc tggcggcaat agggaaagtg aggcagctgc aaggagggcg 420 gcgggactgc actcgagtgt ccagacctgc tcgatggtga ccaccatgtc ggtgaggttg 480 cggttcctgt cccctgggga cacaggggcc gtgggggtcg tgggccggag cgcctccttc 540 gcaggettca gcagtgcaca gagccggagg atcgcaaagt ccatcaacag gaactccgtg 600 agategegaa tgeetgeaaa ateeteeaag atgtaeggea egetgeggaa ggggteggte 660 tgtgcagacc cgaagcccca gcaggtgaag aagatcttcg aagcattgaa aagaggcctc 720 aaggagtatc tgtgtgtgca gcaggctgag ctggaccacc tgtctggacg ccacaaagac 780 accaggagga attccaggct ggctttctat tatgacctgg acaagcaaac gcgctgtgtg 840 gaaaggcaca ttcggaagat ggagtttcac atcagcaagg tggatgagct gtacgaggac 900 tactgcatcc agtgccgcct gcgcgacggc gcctccagca tgcagcggc cttcgcccgg 960 tgccccccga gccgcgcagc ccgagagagc ctgcaggagc tgggccgcag cctgcacgag 1020 tgcgccgagg acatgtggct catcgagggg gccctggagg ttcacctggg cgagttccac 1080 atcaggatga aaggettggt gggetacgca cgcetetgte eeggagacca ctatgaggtg 1140 ctcatgcgtc tgggccgcca gcgttggaag ctcaagggtc ggatcgagtc agatgacagc 1200 cagacetggg acgaagagga gaaggeette atecceacge tgcatgagaa cetggacate 1260 aaggtgacgg agttgcgggg cctgggctcg ctggctgtgg gtgcagtgac gtgtgacatc 1320 gccgacttet teacgacgeg gccgcaggte atcgtggtgg acatcacgga gttgggtacc 1380 atcaagctgc agctggaggt gcagtggaac ccgtttgata ctgagagctt cctggtgtca 1440 cccagcccca cgggcaagtt ttctatgggc agcaggaagg gctccttgta caactggaca 1500 cccccgagca cccccagctt ccgggagaga tactacctgt ctgtcctaca gcagccaaca 1560 cagcaggeet tgetgetggg tggeecaagg gecaceteea teeteageta cetgtetgae 1620 agegaeetee ggggteecag cetaagaage cagagteagg agetgeetga gatggaetee 1680 ttcagctctg aggacccccg agacacggag accagcacgt cggcgtccac ctcagatgtg 1740 ggetteetge cettgacett eggteeceae geetecattg aagaggagge tegggaggae 1800 cccctgccc caggtetect gccagagatg gcccacctet ctggaggccc gtttgcagag 1860 cagcctggct ggaggaactt aggaggggag agccccagcc tgccacaggg ctccctgttc 1920 cacagoggca cagoctogag tagocagaac ggccacgagg aaggggcaac cggggacaga 1980 gaggacgggc ctggcgtggc cctcgagggg cctctgcagg aggtcctgga gttgctgagg 2040 cccacggact ccacccagcc ccagctccgg gagctggagt accaggtcct cggcttccgg 2100 gaccggctga agccctgcag agcacggcag gagcacacct cggccgagag cctgatggag 2160 tgcatcctgg agagettege ettecteaat geegactteg eeeeggatga getgteeetg 2220 tttgggggct cccagggtct ccgaaaggac cggccctgc cccaccgtc atcactgaaa 2280 gcgtcatcca gggaactcac agccggtgcc ccagagctgg acgtgctgct gatggtacac 2340 ctccaagtct gcaaagctct gctgcagaaa ctggcctccc ctaatttatc aaggctggtc 2400 caggaatgcc tcctggaaga agtggcacag caaaagcacg ttctggagac actitctgtc 2460 cttgactttg agaaggtcgg caaggcaaca tccattgaag agatcatccc acaggcctcg 2520 cggacgaagg ggtgcctgaa gctgtggaga gggtgcacag ggcctggcag ggtcctgtcc 2580 tgccctgcca cgacgctgct gaaccagctc aagaaaacct tccagcacag agtcagaggg 2640 aagtacccag gacagetgga aatagcgtgc cgcaggctcc tggagcaggt ggtcagctgt 2700 ggtgggctgc tccccggagc tgggctccca gaagaacaga tcattacctg gttccagttt 2760. cacagetace tgcagaggca gagegtetet gacetggaga ageaetteae ceageteace 2820 aaggaagtga cactcatcga ggagcttcac tgtgcgggac aggccaaggt ggtccggaag 2880 ctgcagggga ageggctggg ccagctccag cctctgcccc agaccttaag agcctgggcg 2940 ctgctccagc tggacggcac tccgagggtg tgcagggcgg ccagcgctcg cctggctggt 3000 gcagtcagga acagaagctt ccgggaaaag gctttgctgt tctacaccaa cgccctggca 3060 gagaacgacg caaggeteca geaggeegea tgeetagege teaaacacet caagggeatt 3120 gaaagcateg accagactge cagcetgtge cagtetgace tggaggeegt gegggegga 3180 gcccgggaaa ccacactgtc gttcggtgaa aaaggacggt tagcttttga gaagatggac 3240 aagetetget cagaacaaag agaagtettt tgecaggagg cagatgttga aatcacaata 3300 ttttaaaaaa tcctggctga tgagcacaaa tctcacatcg ttttttttgc tgctgcccag 3360 cctggacata gcctgcactc tgggtaatgg tgctgtgcac tcctccagga gtgtgagctg 3420 cccagagete tacaaatgag ettgecagea cactgegeeg tacagtgage gagtegacea 3480 actgg 3485

<210> 88°

```
<211> 3427
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Incyte ID No: 5532048CB1
 gagttgtttg ccggctcccg ggccgccaga cgctcggagg gagcccggcc ggctcggact 60
 gggcggccgg gagggagggc gccccgggtc acgacggcgc ccgcaagccg agcgcggccg 120
 ggacgtgcac catggaccca aaggcgggcg gcggcggcga ggaggacgac tgcgtggact 180
 cgggcgccga gaccggaggg tccgactaca gccacctgtc ctccacgagc agtgagcttt 240
ccgttgaaga ggcgcaggac cctttcctgg tcagcatcca cataatcgca gacccagggg 300 agtcccagcc cctgcaggag gccatcgaca acgtcctggc gtggatccac cccgacctcc 360
 cgctgttccg ggtgtccgag aggcgggcgt cccggcggcg gcggaagccc cccaagggcg 420
ctcagccagc gctggctgtg gtgctgttcc tgcaggagga gtacggcgaa gagcagatcc 480
 tgcagetgca ccgcacactg cagcagecgc cctggcgcca ccaccacacc gagcaggtgc 540
acggccggtt cetgccctac etgccctgca gccaggactt ettcacgetg gcccetggga 600
cgccgctttg ggccatccgg cccgtgcact acggcaagga aatcgtgcgc ttcaccgtct 660 actgtcgcta cgacaactat gctgacagcc tcaggttcta ccagctgatt ctccggagga 720
geccageca gaagaaageg gaettetgea tettecetat tttttecaae etggatgtgg 780 acatecagtt etceetgaaa agaetgeeet gtgaccagtg eceggtgeee acegaeteet 840
ccgtgctgga gttccgagtg agggacatag gcgagctcgt gcctctcctg cccaaccctt 900
gcagccccat cagcgagggg cgctggcaga cggaggacca tgatgggaac aagatcctcc 960
tacaggcaca aagggtgcat aagaagtttc ctaaacctgg cagagtacat catgcctccg 1020
agaagaaacg tcattccact cctttgccga gcactgctgt accaagccat acacctggca 1080
gcagccagca gtccccgctc aacagtcctc acccggggcc catccggaca ggcctgcctc 1140
ctgggcacca gcaggaattt gccggacgag ccaacagcac ccccaaccct ccctggtctt 1200
tccagagaag caagtccttg ttttgtttgc ccacgggagg cccctccctg gcctcctcag 1260 ctgaaccaca gtggttttca aacacaggtg ccccagggca cagggcatca gagtggaggc 1320
atggccacct cetetecate gatgacetag agggggecca ggagacagae gtggacacag 1380 geetgegget gteeteateg gacetgtetg tggtetetge atattetgea eccagtaggt 1440
tetgeageae agtggagaea ecceteceet ecgaaagatg cageageeac tgggcagete 1500
acaaggattc cagggaggga ccactgccca ctgtcagcag ggtgaccaca gaggcctcct 1560
gggcttccct ccctttcttc accaaaaggt cttccagctc ctcagcgaca gctcgtgctg 1620
ctcccccagc tcccagcacc tccaccctca cagactcctc cccacagctc ccatgcgata 1680
ccccaaagt caagcagact gatggagaca tgccaccacc cccagggtcg gctggccccg 1740 gggataacga catggaggaa ttctacatct gaatgccctc tgctcttgtt ctcgaaacac 1800
acaaactcag agacacagac tcaggcccca ctgcccctct ggccactgag cacaccacat 1860
tetteatgat ceattteeca ggagecegta geacatttge etaceaceca etettagetg 1920 gggggggtggt atatetetag agacacagea gaaaaatact ggeatttta tgeaaataaa 1980
ttetcaacaa aettgteata aaatatattt tttgaatatt cageatttga ggtatggttt 2040
agtgggttta tacaatttaa atggcttata taattatttg aaatgaaaag aaaacctagt 2100
cagccagaac caatttggca atttttccat ggtatgaagg caaatcaatt aaggccaaaa 2160
cgttgaatgt gggagagata gtaagtgact tgtatgaggg attactgcat aataacgtaa 2220
cgcacacctt actggattct ccatatatat ttacattacc agagaacagt ggccctaggg 2280
atgtttaagc actgcttata atggaaaaag tcagcttgag aagtaaacgt atatcagact 2340
acaggtaatt cctcatcttg aagccatgca acacctgcaa atctggattt atacaaaagt 2400
tgctaatgtg tttcataaag atttagcatg agtaacagac tcttggtgca tttaaaatat 2460
gtgagttcca gaaagtagat ttgcatacac cttttcaaca gcacatttca ctggaatgga 2520
tgaggggctt ctgaagacca ctccactacc tgaatttatt tggatcactg aggaagagca 2580
tttgttggga ttacagaatt ataggccatt agacatcatg ggtaggtagt cttaagatcc 2640 ttcaactttc aaaaaccaca gtctaaggac tatattcaaa tgacaagagc cgcactgtat 2700
actgctttct gcagtgacca tgctgggtca cgcatcctat gtttctcatt tttaaatgat 2760
ttggaacatt ttagccagca ttttgatcac acagattaat aatgctgttc tccccaaaac 2820
gggaaacttt acctgaaacg ctctcctgaa caaacaccag tgcactgcca gcctcacatg 2880
attgcatggg agctttaatt aacgctggag cccagcaacc ttggcttttc ctgcctgtta 2940
tetgetactg teacacegtg aatggtattt gaateteace teeeteteac eteagtaaga 3000
gtatgtttgt ttacagcccc aacctcagca atgccaaagg ctggcatcgg gggcagtgcc 3060
aagctgtccc tggatactat ttacctttga ggaagaacag catgggtttg ccaagctcaa 3120
tteccagget ggtgeteett gaattaatca tggcacagtg tteatetete tggaaatgee 3180
cacgccagcc cagacacagc ctcagagtcc tttccaacac gaccctccag gcagcagtta 3240
ccaaccatca gtcttcagct gaagcttcaa gtctttgcca tccttgtaat gacagcctta 3300
ggccttgccc caagcattct ggactctcta acactcagaa ttgtaatgta atattctgct 3360
ctaatttaaa tttttaaaaa tatagtctcc taattcagga taaggagtaa gcaaactttc 3420
```

```
tgaaaag
                                                                       3427
<210> 89
<211> 1438
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 56002716CB1
etcettacte cacacagtga gcgtggcaag aggggggage gtaggacggg ctttccccgc 60
catecteatt gteeteetac gggategtte gtegeggaeg aatactaate aategeegeg 120
gcatgatatt ctgtttttcc gaacaatcct gaactgaata tcctaattta cagatcagcg 180
cacggcgctg tagattgtct ccacccccaa ggagactaca accatgaaac actttctcgt 240
gaccetgatt acceteaceg egaceaceet cacegegeae geegegeggg tteeggattt 300
cgatagcete accegegtgt cetgeagegg eggtegegge ggeggetegt gegteggegt 360 geegtacate ggetacact gegteggga ceagetgaaa gaeggeagee geacegegaa 420
tgcgctcccc accgggtccg agcggatctg cgacggcgcg ggctgcgatc caagagacag 480
cytcatcccc gtctacycya cyaycacyat cyacytayaa ytyaacycya acctycycyg 540
cgtctcccgc cgcttcgata ccagcttccc cccgaccgta acggaagagc tgaacacgat 600
gggcaatatc gggagcgtgg agaatctcga gccgggcagc gcgggttttg ccaggatcct 660
gegegeette ggeggaaage aaaceteegg catgagteee geegaggega gageegteae 720
getegteaag gtetaceaea tegaegaege eeaegaegag gtegaggaeg agaaateege 780
cgccgccccc gagctgctga tccgcttctt ccgcggggaa gagcaggtcg gcggcagcgt 840
gctcgagcgg gacctcaaag gcctgccgag caaaacgcgt gcgcggattt gcacgaagat 900
ctaagctaac ccctggggcc gcccgaaagg gcggcctttt ttattgggaa cgaaggaata 960
cgattgcccg catgaagcaa aaaatcgctc ctagccacgt cgccatccta gttccctccg 1020
tccgcaaggc ggccgaagcg ctgcgccgat tcgatttcga aatcggtgaa gaagagagtt 1080 tcgaggaaac gaaggaaatc tacgtgcagg gaagcgagcg gaactccctc ctgctcatgg 1140
agccaaaaaa aacgggctcc taccggcgag cgctcgagaa aagaggcccc ggcctccacc 1200
acetegecat egacgtgete gacetegaag getteetege gacgetegeg ggateegget 1260 ggtteetgea eeceaacage etaaagaega tegaaagatt eegegeggee tacetegege 1320
ggccgggatt tccgggtctc atcgaagtgc gggaaaagaa gaagctgcga cagggaaaag 1380
acttcgtgga gggcgttacg ctaaaattcg acgccacgct cactgtgtgg agtaggag
<210> 90
<211> 1710
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 60129797CB1
<400> 90
ageggeegeg gegeeegga geetgegeaa acceageece ageeceagee ceageetgeq 60
gegeeggagg geeeggaaca geeeeggeat cegeeceage eecageecea geeeeagee 120
cagececage eccagecega geecageceg tgggggeege tggaegaegt gegetteete 180
ategeetgea etteetggta etgaeggegt eeteegeagg atgtegeeeg tetgteegee 240
gtcccctgtg gttcttgcct gccttgtctc ctctccccac gtccctgcgt ctcttacacc 300
ccctcccacc cgaggetccc cagagatagc agagaattcg aagaggtcgc cggggactgg 360
aaagaagtee eggeaggee geettegeag tetacaceee ageetgette ceageetaca 420
cccagaccca gctcagacct tcgtgaccac cccatccctt tctccggctg gctgggtcgg 480
gggcatecet ctetgteget ggettecaga ggcaggacag geeteetggt catgteccag 540
gtcatggaga agcccgtgcc acagtgaccc tccccatact cctggggggg ctgctctcca 600
teetggateg taaggaggea teateagget gtgtteetgg aacceeaata accetgggee 660
cccagggcca gcctgttgta gagggaggct atctgaccgc cggtctggca gaggagatgg 720
gtgggcaget cccagacacc ccaaaggacc cggttctctt cccagagegt cctaaggtta 780
etettggaac etgatetttg tteceteate ecagggaaat gacacactet gtatttetgt 840
tttatttaga aatgatttaa aaaacattat acaaaggctg atcagtttaa aatgtgactg 900
acactgaaat gctgtgatgt cccccaggct gaggggaagc taggctctgg ggcccccagt 960
getttgeece tetgtetgee etgteetggg gtgatggaea aacagatgae cacaggeagg 1020
agaatctgag attggaagcc tctaggctga gccctctggg cctggcccca catccctcac 1080
ctctgcagcc tgggctgcct gcctccatct cctgttcatt ctcagctggc ctgccaggag 1140
```

ccaacgggga gcctggcggg aggcgggggt gcctagagct ttcaagaagt gagagcacca 1200

```
acctgaggag tggacaggga ccaggaagtg ggggaaggga ggccaggaag aggtggatac 1260
aggagacact teteatetea teteagacee tagaggggte cacagatggg gacacaagae 1320
ccagccagcc cactggatgg cccgggcaag taacaacctc tctgtgcttc atctgagggc 1380
acggtgagag ttaccgtcgg cctcccaggg cctaacacga gtttcatgtg agtggacagg 1440 tgtgagctaa taaagtgctt tgcaaagtat aaaacactgt acaaacctat gaatcactaa 1500
tatetecgea gttgttecet geetgteeca ggageetgee ttggccaaaa tgagaaaaac 1560
caggatgatg acagggacac ageggaccac atggcacctc tgggacaaga gattttgctt 1620
gagacagete ecagggeage aggagteett gtetgtgeta cagggtaage egaceceaat 1680
cccagagacc acagggtcgg gggcaaggcc
<210> 91
<211> 753
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6246243CB1
<400> 91
gagcatggca gtgagccaag gagacgggac cctctgcttt gtcctcctgc tgtgctgttg 60
gcaagaaact gagctccggc cgagaaccgt gattccaggt tcacctactg aaataccatt 120
cagttcaaaa caggaggata tgtctgaatt attagatgaa attctggtcc aggagatttt 180
ggatetgaat aaaacaacac egagegaaat gecaagtaca geateaacat tateaacace 240
gttacatgct ggtattgatg agaattatca agctggtggt tctgagaatt accatgaatt 300
attagagaat ttacaattct ctcctggcat tgaggtcaaa atttccaatg atgaagccaa 360
tgctaatgca aatctccatg gcgatccttc tgagaattat cgtgggccac aggtgtctcc 420
tggcagtgag aagagtgttt ccagtaaaga aaagaattca aagaacactc agtatgaaaa 480
tetatecatt etggaceaaa teetteaaaa tattggaaga tetteaggaa acatttteea 540
taaagagcag cagaggacca gcgcacagag gaggagccaa ggcagtcagt gaggccgcag 600 ccccagaccc cctgcgcagg agaggagcct gctagaaccc ccacccacca gcctccggaa 660
cagggcactt gtgtgcacac gcccacgttc tctgaaccat tccacataaa ggaaaatcgt 720
ttattcacac gaaaaaaaaa aaaaaaaaaa aaa
<210> 92
<211> 1780
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6804755CB1
<400> 92
gcgaatcttt gtattgtccg gcttagtgga agctggattc ccatatcggc tccagcactt 60
catctgctga gatgtgctgt tggttgaagt ctatgaagaa aatccagcct tggctgcgta 120
tgttaccage cttgtcaggt gcctgctctg gcctgcagcc ctcgaaagcc gccgtgtgcc 180
catcagagca tgggagcaaa aggtgccctc atgcaatggg cttcgatctc atcatctgcc 240
tggaaggate teaggeeete caegagteee cagageagga etggeageeg etgeteagag 300
gctggactcg aatccacagg cctttttccc agagcggcat ggggcggctg tactgcagct 360
actetgeate cetggacaat cetegettte tggacagett ceteggetga aaggagcaca 420
ggctccatgg caaagctact ggctctgggt ctgaggagag gaaggaggcg ccgqqtctgg 480
ggcatgttcc tgtgtaggaa gccagggtgc cgctccagag actcgctgag gcacagtccc 540
catctcagtc cagctctggc cgtggcagcg gcttccaggc tcacccagtc tcacaggagg 600
ccaaggaggc tgcggaacag cccaggggca gcaggagctg ttctcccagc ccggcctca 660
tgccgtctca gtgagctctg cgacctgggg cccccacttg gcggtgggcc caggctgggg 720
ggtctccagc taggatgtag ggcggtggtg ggcccaggct ggggggtctc cagctaggat 780 gtgggtggtg gtgggcccag gctgtgtggg gggagtctcc agctaagata tagggtggtg 840
gtgggccctg gcctgggtgg gggttctcca gctaggatgt gggtggtagt aggcccaggc 900
ctcgggggct tcagctagga tgtgggtggt ggtaggccca ggcctgggga tctccagcta 960
ggatgtaggg tagtggtggg cccaggcctc gggggcttca gctaggatgt agggcagtgg 1020
tgggcctagg cctgggggtc tctagctagg atgtggggtg gtggtagacc gaggccttgg 1080.
aggtgctcca ggcagggcca cagctgattt gtctgggaag ggagggggct tgtttggagg 1140
gctggagtag acagcagcca ggaggaactt cctttggtag tgggaggccc ctccaaaagc 1200
acgcctgcga aggccctagg gcaccagggg acatgggagc attctttgct gtgctcagag 1260
agggtgacat gggagaactg gggccaggtg ggcttaattt tctggatcct gtggcccctt 1320
gggttggatc gggctggggt ctcaggcaga gctgtttctg cactgaggca gggactgcag 1380
```

```
gccagtgacg gagtgatett gtgtgactee atgeteteag agtettgetg gaaaceeet 1440
ggctetcaga ccetettetg tgaaccagaa gtetetatee tgeettetge tgagggteae 1500
aggataagta tecataggtg taactcacac accagcactt tgcaaggtgt cccccaccc 1560
acacagaaga gttcctctgt gcccgcaggc aggagcagcc ccccacatac acacacagta 1620
catteattea tteacteaca cagtacttte atteatecae ceatteaaat agtacattea 1680
ttcattcgct cactcaccca ccacataaca acataaaccc tcattcacac gagaaacacc 1740
ctatgttaac cttggcagac tggtacgcta cgatcgctgg
<210> 93
<211> 580
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6856852CB1
<400> 93
gtctcaacgt gctcctctga ggatcagctt ggaacgtctg ctccggaagg aggaccctcg 60
agtttettea etgeetgtea geageeete tgeeteetee gtgeeeege eeetetetge 120
cagggcgctt ctgccaacgg ctggttattt atatccctga gcagctgctg acagacagct 180
gggagctggg aggcggctga cagggacgag cgaggcagag atgacagggt tgtggggcggt 240 gctgtcactc ttagcaggac tgctgggcag agccccctcc ccttcaccca gggaggtgag 300
acttagacag getgatggge catetgggaa ggggeacete aaacggeagg aagecagge 360
tgtgaacccc ggggacgggg aggcagatgg ggttggaggc aaggactttg cccttgttga 420
ctttttccag aagggtgga agcagctgcg gcttaattat ctgggcactt gcccagggca 480 tctgctgctc acaagctgta tgaccttggg taagtcacga actctgggat tttggttcct 540
ctgaggaagt gagatggttg gatgagatgc tcgctgagtt
<210> 94
<211> 731
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7482027CB1
atgeetetgg etttgaceet tetgetgete tegggettgg gegeeeegg aggetggge 60
tgcctgcagt gcgacccctt ggtgctggag gccctgggtc acctgcgctc cgccctcatc 120
cccagtcgct tccagttgga gcagctgcag gcgcgcgcg gggccgtgct gatgggcatg 180 gaggggcctt tcttccggga ctacgcgctg aacgtgtttg tggggaaagt ggagacaaat 240
caactggacc ttgtggcgtc ctttgtcaag aaccaaacgc agcacttaat gggtaactct 300
etgaaagatg ageetetget ggaagagetg gtgaeeetea gggegaatgt gateaaggaa 360
ttcaagaaag ttttaatttc atatgaatta aaagcctgca accccaaact ttgccgcttg 420
ctaaaagaag aggtgttgga ctgtttacat tgccagagga tcactcccaa gtgtatccac 480
aaaaagtact getttgtega eeggeaacee egegtggeee tgeagtacea gatggacage 540
aaatacccga ggaaccaggc gctgttgggc atcctcattt ctgtgtctct ggctgtcttt 600
gtcttcgtgg tcatcgtggt ctcggcttgt acatacagac aaaaccgaaa actcctgctg 660
cagtaggacg gtggtttggg ggtaaggaga aaggaaaata aatttaataa aattggtgac 720
aaatccaaaa a
<210> 95
<211> 2758
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7493507CB1
<400> 95
gcggcggcgg cggcggcggt ggcggaggcg qacacattgg cgtgagacct gggagtacgt 60
tgtgccaaat cattgccact tgccacatga gtgtaaatga tggcggatgc caagtatgtc 120
ctctgccgat gggaaaagcg attatggcct gcgaaggttt tggcccgaac cgcgacttca 180 acaaaaaata agagaagaaa ggaatatttt ctagctgtgc aaatcctctc cctagaggaa 240
```

```
aaaattaagg tgaaaagcac tgaagttgag atcctagaga agtctcaaat tgaagccatt 300
getteetegt tagggaacge gaateeeetg agetgaagga gaaggaaaaa tggateeget 360
ttettaaacc tttecagaat ttgeccetag aaccactect attettgacg cecagaatgg 420
tcagtgcctc acagaatgag gttcctgcgg cacccctgga agaactggcc tacagacggt 480 cgcttcgcgt ggctctggac gttctgagcg agggctcgat ttggagtcaa gaaagctctg 540
cagggacagg tagagetgac eggtetetge gagggaagee catggageat gteteetege 600
cctgtgattc gaactcctca tctcttcccc gcggagacgt gttgggcagt tccagacctc 660
acaggaggag gccatgtgtg caacaaagcc tgtcaagttc gttcacttgt gaaaaggacc 720
ccgagtgcaa agtggaccac aagaagggc tcaggaaaag tgaaaaccca agaggcccgt 780 tggtcctccc agctggaggt ggtgccaag atgagagtgg gtccagaatc caccacaaaa 840
attggactct tgcaagtaag aggggaagaa actcagcgca gaaggctagc ttgtgcctga 900
atggatette cettteagag gacgacaegg agagagaeat ggggageaaa ggaggeaget 960 gggeageece gteettgeee teeggggtea gggaggaega teeetgtgee aacgetgagg 1020
gacacgaccc cggtctgccg ttgggcagcc tcactgcgcc cccagcccct gagccctcgg 1080
cctgctcaga gcctggagaa tgccctgcga aaaagaggcc gcgcctggat ggcagccaaa 1140
ggccgcctgc cgtgcagctg gagcccatgg cagcaggggc cgcaccatcc cccgggccgg 1200
ggccagggcc cagagagtet gtgaccccgc gcagcaccgc caggctgggc ccgcctccct 1260
cccacgcctc tgcggatgca accagatgtc ttccttgccc ggattcccag aagctggaga 1320
aagagtgcca gtcttccgaa gagtccatgg ggtctaattc catgcgttct atcctggagg 1380
aagacgagga agacgaggag ccaccaagag tccttttata ccacgaacca cgttcgtttg 1440
aagtaggaat gctagtctgg cataaacata aaaaataccc cttctggcca gcagtggtca 1500 aaagcgtcag gcagagagat aagaaagcaa gtgtgctata catcgaagga cacatgaacc 1560
cgaaaatgaa aggtttcaca gtgtctctta aaagtttaaa gcactttgat tgtaaagaga 1620
aacagacgct tctgaatcaa gccagggagg acttcaacca ggacatcggc tggtgtgtct 1680
ccetcatcac cgactacagg gtccggttag gctgcgggtc ttttgctggc tctttcctgg 1740
aatattacgc ggctgatata agctatcctg tccgaaaatc catccagcag gacgtcttgg 1800 ggaccaagct tcctcaactg agcaagggga gccccgagga gcccgtggtg gggtgcccc 1860
tggggcagag gcagccctgc cggaaaatgc tccccgaccg ctcgcgggcc gcccgggacc 1920
gggccaacca gaagctggtg gagtacattg tgaaggccaa gggcgcggag agccacctgc 1980
gggccatcct aaagagcagg aagccatctc gctggctgca gaccttcctg agctccagcc 2040
agtacgtgac ctgtgtggag acctacctgg aggatgaggg gcagctggac ctggtggtga 2100
agtacctgca gggcgtctac caggaggtgg gggccaaggt gctccagcgc accaacggcg 2160
accggatccg gttcattctg gacgtgcttc tgcccgaggc catcatctgt gcgatctctg 2220 cggtggacga ggtggactac aagacggctg aggagaagta catcaagggg ccttcgctga 2280
gctaccggga aaaagaaata tttgacaacc agctccttga agagcggaac cggcgccgtc 2340
ggtgagggag cagccggctg tgctgtcagc ggggcctggc ggtggaagcg cctccagtgt 2400
gcatgagcgt gtctgaagat ggggggctca gggggcacgt ttgcgtttgg acctgtctgt 2460
gcgttctcct gcgtggcagt cctgatttcc atacttctgg agaatccatt tcgttaacac 2520 tgaaagccag ttctctttc ctggcagttt ttttcatttt atttttggca ttttttacaa 2580
gataccgttc gggaaaggct tttgaaagga cggaagcgta ttcactgtgc gccagtactc 2640
ctggctgtgc tgtggtttct cccgacgtgc acatcgatct cgtatgtgtg gcatctgata 2700
ttaaacggga ggttttaaga agcgtctgcc gtgatcatgg agcttcggaa gcgggaat
<210> 96
<211> 1383
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3075994CB1
ggagtggcca tggtgctgct gctgctggtg gccatcccgc tgctggtgca cagctcccgc 60
gggccagcgc actacgagat gctgggtcgc tgccgcatgg tgtgcgaccc gcatgggccc 120
cgtggccctg gtcccgacgg cgcgcctgct tccgtgcccc ccttcccgcc aggcgccaag 180
ggagaggtgg gccggcgcgg gaaagcaggc ctgcgggggc cccctggacc accaggtcca 240
agagggcccc caggagaacc cggcaggcca ggccccccgg gccctcccgg tccaggtccg 300
ggcggggtgg cgcccgctgc cggctacgtg cctcgcattg ctttctacgc gggcctgcgg 360
cggccccacg agggttacga ggtgctgcgc ttcgacgacg tggtgaccaa cgtgggcaac 420
gcctacgagg cagccagcgg caagtttact tgccccatgc caggcgtcta cttcttcqct 480
taccacgtgc tcatgcgcgg cggcgacggc accagcatgt gggccgacct catgaagaac 540
ggacaggtcc gggccagcgc cattgctcag gacgcggacc agaactacga ctacgccagc 600
aacagcgtca ttctgcacct ggacgtgggc gacgaggtct tcatcaagct ggacggcggg 660
aaagtgcacg gcggcaacac caacaagtac agcaccttct ccggcttcat catctacccc 720
gactgageeg geecegeece gtgeeceege tegeceette tetecegtee teacceacet 780
cctgcccgcc ccacccgagg cgccacccca ccctttgaga gcctggcggt ggggtggacc 840
```

```
etteegttee eggaggegge etaaatggge gaactettgg tgeteaaggg tataagtgge 900
cgggaagagg aggagacccg gccagaggag cagagcgact tccggaggga tcacccgcac 960
ccaagtgcgc gctggacccc ataggggcag aggtcgtggc tttctctttt gtacagagat 1020
ggggagcagt tttaatagcg ggactcagag gcccagaaag ccggagggaa gcccccgcag 1080
cttgcgaggg aaataacaga aacaggagga gcccatttag gcaagagaag acattaaaac 1140
agggtagtgc aggttetecg teacaactit etetegeeac cetetegtec cetegtetec 1200
actttcaggc tcaggctcca gccttggcag ccttcctgtg aactggagga accagtgaat 1260
tettteetgg catttaaaac geattetgta cagteeccat teeeccetat eeggactagg 1320
ccctggggct acagetgctg etgeetette taataaagtg aggttggggg gataaaaaaa 1380
ttg
<210> 97
<211> 826
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<223> Incyte ID No: 2378119CB1
<400> 97
eggaegegtg gggteggtag tetgteegae egtaecatta ggegeetggg eeggaggagg 60
ggttttcagg gtcgtaggac gccgttgggc accacgctcg gagaaggaca ggacaatggc 120
ggccttaggg tccccgtcgc acacttttcg aggacttctg cgggagttgc gctacctgag 180
cgcggccacc ggccgaccct atcgcgacac cgcggcctat cggtaccttg tgaaggcttt 240
cegtgeacat egggteacca gtgaaaagtt gtgeagagee caacatgage tteattteea 300 agetgeeace tatetetgee teetgegtag cateeggaaa catgtggeee tacateagga 360
attteatggc aagggtgagc gctcggtgga ggagtctgct ggcttggtgg gtctcaagtt 420
gccccatcag cctggaggga agggctggga gccatgaaca tggagaatat ccttggatgc 480
tgcattcata ggagaattga ataatttcta tcaatatgta tttatcatta aattttttt 540
aaaaaaaaaa caaaataaaa aaaaaaaggg ggggcccccc ccaattgggg gcgcccccc 660
cccctttatt aaaatgtttt cacctttttt cccgcaaaaa tttttccccc cccggtaatt 720
cccccaaat cgggggggg gggaaaagtt gttcccgggg gggggggtta ttaggggggc 780
accccacata tttttggggg ggcacccccc cctttttaag gggggg
                                                                      826
<210> 98
<211> 1025
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2987418CB1
gaacttacta ggatcattca gggattcttc cctcacaagg gagggaaggg tacagaaaga 60
taagetgget aagtatagae geagaeggtg aaacteaate geagagtget gaeagagett 120
ctcttagggt ctacagaaca gatctactga gtctcacatc tcttggtcag cagcgacagt 180
gatgtgcaga atggattaac gagttcttgt ttctggccct cgtataactc aaaaactcgt 240
ttcaacttaa ataaattaaa cctttatgtc cacaggatag tctagagagt tgaaatttac 300
tttttgccag ctcactatgc atgttcacca aatggtaaag ttctcacttt aaagcccagc 360
aagacaagat gagctctgtc tgcccagcag cctttcagag gcattaaggg taagaggaa 420 gcctccctcc agccctgttg aacacacaag tagatgaagt ttagaagaat tctttcacta 480
tttaaatcag ctcttctgtc tcactacggc atgatagagg gtaaaatgaa gagaaatgaa 540
agactaacta cattttactt agaccactac atcgtctgct cagtctatag ctttcctatt 600
tigttccaca ctcctggaat tctcacaatg ggattcaaag ctcacctaga agccactctt 660 agacaacaaa ggacacagtc ccctttggag ttgttgctgc cacttctctt gtgtcaaaga 720
totacaaaca tigtggctgt gaagtaggac titatgaaca cacagcaaga aagtatatit 780
tgtgaatata ctgcaaccgg acattacccg ccttacatga atttgacatg gaatatgaat 840
tttccctcaa ttcagctgat aagattgtaa gagcaaaggc ataccactgt cagaaaatag 900
atttaccetg cacccccaat tgtaattccc tttctagaaa tctacagaaa aaataggata 960
taatcagaca ttttgtaaga tgttgtccag attctgaaat gcattaaaat caaactgaac 1020
ataac
                                                                     1025
<210> 99
```

<211> 1223

```
<212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Incyte ID No: 4223862CB1
 tggcttattt tttgttctta tgttttttt tctctcttct tctgttagtt tcttcttctt 60
 tettegttgt gtetttettt etetegttee gtttetagtt tttetttatt catetttet 120
 ctttetttgt tetttettet tetettetet tttgcateet ttggtgtgte gttgtgtett 180
 tgtgtctttt gtgggttggt ttggttgttg ttgcttgtgt tgttcgggtg cgtgtttgtg 240
tgttcggctt gtgtgtgttg ttggagtttg ttgctggggg ctggtggtgg tcggtgtttg 300 ctgttctttt gttggtgtgg gtgtttttt tttggggttc ccggaatcat taatgcaggt 360
 taacctggct tatcgaagac ggctcgagcg gctcgaggtt agcctcttgg gccacagcat 420
 ttagggaagc tggttacata gagatggtct cagaaaataa ggctgtggta tggtttgtgt 480
acttcacaga gataggacca ctgtgtcagc cacagctctg cggttctcaa agcttggggg 540
tggagtgctg ctgctgtttg tctctgctgc acatggctgc acagatgttg ggaatagaga 600 agtatttggg cagggagatg gatcagcagg gttccccgtg ctatcatcat ttccttttt 660
agaagttttg tcatttagag gttttgaatc ttgcaataag cggtcatcct tgattaactt 720 tggacttttt cccttaaatg tcaggcacct aattttaaac tttttcctgg ttttacttct 780
ceteccagge tattttgtcc ccagtecttg gttgcttggc agttgtttcc aatatagcgc 840
ctcctgcttt ccattcagct gggatccagc tctagctcat gccctgtacc tggggcctat 900
gtgtgtaaac taaagaaggg aaggatgccg ggcatggtgg ctcatgcctg taatcccagc 960 actttgggag gctgaggcgg gcagatcatg aggtcaggag atcaagacca tcctggccaa 1020 catggtgaaa ccctgtctct actaaaaata caaaaattag ctgggcgtgg tggcacatgc 1080
ctgtaatccc agctactcgg gaggctgagg caggagaata gcttgaacca gggagtcgga 1140
ggttgcagtg agctgagatc atgccaccac actccagcct gggtgacaca gtgagagact 1200
ccatctccaa aaaaaaaaaa agg
<210> 100
<211> 549
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6046406CB1
tgaacccact tagcctctgc ccggggctga gcagggatag aatggcttct tcctcacctg 60
tgtcctggcc ccactcatgg ctcctcccac tcacacccca tcacccctt cctcccgcct 120
catectegge tgeteceett taggaetttg gggtggatge eccagegeet gtgggtggge 180
geggggetgg treecaccat egecetetge tgeteagagg ceagagetgt gtgeceetet 240
ccaggetgga tteetgaate tgggatgaet cagteacetg tacccaagag cagcagaggg 300
cacaggcaca tecetgteca ecgaggagga aagacecacg cetgtecaat gggagggtgg 360
ggttcagacc tccataaaga tcggtggatg tttggacggt ctcgccttgg ttcaggggta 420
aggtcgtccc ctccggaggt ctagcatagg cttgctttct gcaagaaaac ttgggaccaa 480
ggaggatggc agcagaactg ggaaactggg ctgctgggca tctccagttc cccaggcttg 540
gatggaggt
<210> 101
<211> 520
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6743529CB1
<400> 101
gagccggcgg cggcgggt acgaggcgcg cgctcggggt cccggtcgcg aggaggagga 60
ggatgtggcg cgcggagggg aaatggctgc cgaaaacaag ccggaaggca caaggaagga 120
cagacccagt ctctgtcctt atggagctaa gggggagacg gacattaatc aagatgccat 180
atgaaatttc agctgggact cagtgctgtg aagagcgttt cccaaagtgt attctgcgga 240
actagcacct actgtgttet caacaccgtg ccacctatag aagatgatca tgggaacage 300
aatagtagtc atgtaaaaat ctttttaccg aaaaagctgc ttgaatgtct gccgaaatgt 360
```

```
tcaagtttac caaaagagag gcaccgctgg aacactaatg agagatcatg atgcagccgt 420
cettitiggat tiettittaa taatgigtga ceetteacet tigateeeet gaeetgeatt 480
accttggtaa ccatttcatt ttttaattta atttcatttt
<210> 102
<211> 950
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7283809CB1
<400> 102
tagggacaca ggtccccagt atagaaacac ctccttcact ccctggcgtg cctccatctc 60
tracgtetet etecteraac tecceaetgg ceetettgae agggtagtte teagegtatg 120
tgcctcccca atctcacaga ggaccctcat ggtgaaagca gcccttgccg ctcatattgg 180
gggcccctgg ctgccacatg atgggtctcc ttcacctggc actgcttgct ctggccccac 240
teceattett gtetttettt ggetgttece actetgtetg tigttttgge etcetettt 300 ettttecte teaageattt gtttttecea gggetecate tigggetett tiettecage 360
tcattltgtc catctctgtg atttttgtta accetececa tatctgtece tetggeecag 420
ceteteegga gatgeacetg cacattteea getgeetgtt agttattget eeetggggta 480
cettaaaccc atcatgtgta cecetcactc atccacecca etgtectcae ggagacegge 540
tectecactg ceteteeteg ceteceactt teagttggte atacagtget gatgggtttg 600
getetgaaac gteeceteea tteeteeaac eteegeggee eeteecaace tgeeetggtt 660
agaccttcat catctctcat ctggaccatt gcgcagcctt ttacttagct ctgggccacc 720
ttccatacag ctgtaatgcg acatttccaa aattcaggtc tgagcacatc acttccttgc 780
cattetggcc caaaatactg getteceecc atetteceta cacceetgaa cagetgttet 840
cttctgccaa gcttctctag aatgctttct gtccctccag tgtcttgtcc ccctttgcta 900
ctcatctgca ttccagaacc cacctccagc ggccgccgac tagtgagctc
                                                                      950
<210> 103
<211> 913
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7637563CB1
<400> 103
gccgtgcgta agactgcgtg tgtaagcaga gggccctgtt gggaacctga aaaggtgtcc 60
aggeaacete agetgaeeee ageetetatg eggeetetgg gttgggaaac getgtttete 120
ttctgtctgg agacccctca ggaggaaggg tctcccgtct gctgggtgag gggctgaagt 180
tegggeeece ttgeeteect eeeteaaggg caaggeageg aatggegete ggetgeeeg 240
ggetgeeete gtetaggeee catgegggtt eeetggggge eteetgatge tggeetgggt 300
etttaetttt geggeeeteg ggeeetgtgg ggaeteggte ceaeceaget geaeacetet 360
ctatggggcc aagatgtggt cctggagatg cccaagatgg gacccaccgg gagaaactgc 420
gccaagggca ggctggcctc tacgcggcgt ttcttacaac tgcacaccca gccacgtgat 480
ttcaaggaac atttcagtgg aaagaacac cactccaaaa atctacggtt cctcactcca 540 cctgtgtgta cgtggatgtg tgattacttc aggcctgtga gtttacagca gaacatactt 600
catgattect geceggetee gagatacett gtettggace tggggggtgg gaggagetge 660
cttaaaacca acaagcaaac aaacaaaata caccaaaaac aaaagaacag aaacaacaga 720
aataactgtg gagggtggca gtaggtgctt ctgatcaacc tgagaaacac gagggaatcc 780
tttgctgtgc agttccctga aatgtcacat ttcagaaaac ctaaggtcaa aagtatgaga 840
cggaagggac cggaaagtcc agggataacg aattetettt ccagcacact gcggccgtaa 900
tagtgaggcc gag
<210> 104
<211> 640
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7663814CB1
```

```
<400> 104
gggcctctca aagtgctggg attacaggca tgagccacca tgcacggcct ccaaacctcc 60
taatattaat atggaaactt cagcatcctt gagaaaatct gagcaaggaa gacctttggt 120
gatgagtgaa ccgcatgett teacettgcc ctctgcaget ggctgcaccc ctcctctt 180
gccagagttc tcttccagaa ccatccacta ccatcggaaa gactcatcat cctcacatga 240
aacaactcac aggaaacaac tctatgtacc atacagttca ttctcttcgg gttacaaact 300
atacccatac ttcgccattt cagaataatg ctgacaccat attttgtggg taaaaatata 360
ggcaaacttt acttttgata catcattgac ccaaatacaa taggaactaa catgaaaagt 420
gttcgttgtt tttgacatga ccggttggcc aaatccaatt gctataatta tgactatccc 480
teetttetaa eeaaceetet aacattteet ateeagtaag gtggatggga ttgggaattt 540
cettecatae etggetatet atgttagaaa actgtggcaa aacggacgga tggagetgca 600
ccatctggta aagccatcct ttccctttgg aatttcctta
<210> 105
<211> 1113
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 8001939CB1
gggccgtccc ctcctgtgaa ctaaagagtc gccgcagaca agcaggcccc cagatggaga 60
accageetgt gaggtggegg geeetgeeag geeteecaeg eecteetggg eteecegeag 120 eeceetgget eeteettgge gtgetgetge tgeeegggae eetgegaetg geaggaggae 180
agtcagtgac ccacaccggc ctgcccatca tggcctccct ggccaacaca gctatctcct 240
teagetgeag gateacetat ceatacacte cecaatteaa ggtttteaca gteagetact 300
ttcatgaaga tctccaggga cagaggagcc ctaagaagcc aacaaactgc caccctggac 360
tgggcacaga gaaccagagc cacaccctgg actgccaggt cacccttgtg ctgccgggag 420
categgeeac tggcacctac tactgetetg tecactggee acactecaeg gtgagaggea 480
gcggcacctt catcctggtc agagacgcag ggtaccgaga gcccccgcag agtccacaga 540
agetectget etttggette aceggeetee tgagtgteet gagtgtagtg ggeacggeec 600
tgctgctctg gaacaagaag cggatgcggg gtccagggaa ggaccccacc aggaagtgcc 660
cagatecaag atetgecage agececaage ageateette agaatetgte tacacagete 720
tgcagcgccg cgagaccgag gtctatgcct gcatcgagaa tgaggatggc agctcaccca 780
ccgccaagca gagcccctc tcccaggaga gaccgcatag attcgaagat gatggcgaac 840
ttaacctggt ctatgaaaat ctctaggatg ggctccaccg ctcatagagc ttgccctggg 900
tcagaggacc ggggcagccc ctgccaccaa aggacttgat ctgagttggg agtaaggccc 960
ccagggacac cccatcattt caccctcaca ttcaaggccc ttcctgtctt ggacggcccc 1020
actgaccccc cattctatgc cccaaacacc aaggetttcc catcttgggg cctttgccca 1080
ggctgttcct tctgccaggc aggcccttcc tcc
<210> 106
<211> 933
<212> DNA
<213> Homo sapiens.
<221> misc feature
<223> Incyte ID No: 8191019CB1
gcttttttt tttttcaaa ctgtttcaa agccatctct cacccaaaaa tacttgcccc 60
agectgetge attteccage geaggetegg gecageetge taggeageae tgggaettgt 120
catttagggg tgggcctggc gggggacagg gagggggcag gagggcaggg ggctatggtt 180
ctggatgttt cattcagtcg ccttggccct cagtgtctgc atctgcagag tggggcctga 240
tacccctctc tctccacaga ggggcttggc attagcaagg gtccctgcaa acatgcagga 300
ggcagagaac ctgggtagaa agttccagcc cgtggccata cactcacacc ttgggggccc 360
agecageaag gggagectgg aggcaaegtg ggcaegggeg ggcagggget geeggatete 420
tegeceggee aaggtttetg ceacecteet egggggteee aggetgeagg teecegtggt 480
ggtccccact tcctggtcct tctgctctgc aagcatctct ccttccctcc ctgtggtctt 540
ggcgccatga acgtttcagg tgtgtccctg acacatggtg ggctgccaat atttaagagg 600
ggetttteta tgtgaggtac agcetteetg tgagateatt acaaceteca aatgtgcaca 660
cetteaggee tteectgeag aggaceetat gteeteeggg tgtetgegta tgtgeatgea 720 egtgtgtgta caegtgeata tgtgtgegea tetgeatgtg tgtgegtgat geacaegtgt 780
attaagttcg ggaaaaggca ggagggcagg ctgggcgtaa gtctcccatt ccgtgtgtgg 840
```

```
cetttgactg aagtggttte cagagtgtea ceteetttet teetttggge etggggteec 900
tgggtctttc tggggccact ctctaaggcg acc
<210> 107
<211> 1280
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 919788CB1
<400> 107
atteggeteg aggtaagaat ccctcatttg ageagacttg ttgtttgttt taggaaatag 60
acatacatca tccgtgtaat tttaagtagt ccagttatga atatggaatg aagggataaa 120
ttectgatgt ctccattaag ctcctctgtg taaaatactc catggcaaag ttgctgctat 180
ttaaagtagt gagtttgatc ttggctttga tctaaacctt ttgatcttga aagaaggatg 240
gagtagcaat aaagagaggg caagacagat tttctttaaa gaaatgtgat aaagttaaag 300
ggatggtcaa gacccagcaa gcaacaggac aacccgactc tccgccccgg cccgccctca 360
ccggcaggcg ggttccagca actgctgatg cggatgagaa ggcctttggc gggtggagga 420
aaatettggg gtategeaca tttttataaa eegetgeaga gggagegteg egeeggggeg 480
gagtgcgggc ttgcgcggca agtgcgcgcc gaggtcacga aatggattgg agtgaaccgg 540
agaccccgaa aacggaagcg cagggagaag gaagaggtgt ttgaaaagct tettecagac 600
cagetggtet tgettetgga geatetettg gageagaaga etetgageee eegaactetg 660
caaagcctcc agaggacata ccacctccag gatcaggatg cagaggttcg ccatcggtgg 720
tgtgaactca ttgttaagca caagttcacg aaagcctaca aaagtgtgga gaggttcctt 780
caggaggatc aggccatggg tgtgtacctc tacggggagc tgatggtgag tgaggacgcc 840 agacagcagc agctcgcccg taggtgcttc gagcggacca aggagcagat ggataggtcc 900
tcagcccagg tggtggccga aatgttattt taacgaggaa agaccacagc aagattcttt 960
cattegtete etectageet gggggaccag getegaactg accetggaca teaaaggagg 1020
gattatgtgg ctgctaaagc catcggccca cagccctgtt cacgtcttgg tgcttctctt 1080
teccagagge tggteccage caggeacaca caaaaggeag attetegtaa acgeageete 1140
cctccctgga gggctgctcc tggcctggat ctggagtgag ctgtctgaga ttttgagtct 1200
ctgggagatg ataatatatc aagaacatgg aaactgtgac atttacatgg ctgtcaacat 1260
gctgatggaa tcataaacaa
<210> 108
<211> 697
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4758058CB1
<400> 108
ggaggaaagt gaggagggt ggaccaggcc tgggagggtc ctgggtgggg gcgctaagga 60
gaggaggtgc agtacagcca tggggctctg ggtgagaatt gcagggaagg atgggaggga 120
ggaatgggga ctggggtggg ggcgtgaggc agacagttct cctttgggtg actgtgctga 180
ggacagggtg ggagatggag agccggatgt tetggetttg etgetgtgea ggaeteatte 240
gatececagg agggtgagga gteegaggge tgetetgatt egetgaagtt tgtetgtgea 300
ctagcaccct ggaatgagca gtctccaggc catgaagacc ttgtccctgg tcctgctggt 360
ggcccttgcc ctctctcccc agcctcaggg tctgcgctgc tacagatgct tggcggtctt 420
ggaaggggcc teetgeageg tggtetegtg eccetteetg gatggggtet gtgteteeca 480
gaaagtgagc gtctttggca gtgagtcctg gggtgccagg gcagagggca ggttaagtgc 540 cgttgtggac tcccagatct cttgctgcaa gggagacctc tgcaatgcgg tggtcctggc 600
agceggeage ecetgggeec tgtgegtaca geteetgete ageetggggt cagtetteet 660
ctgggccctg ctgtgaggcc ctcgtgccga attcttg
<210> 109
<211> 723
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499835CB1
```

```
<400> 109
attcactcca gtgaccatcc ctgagatctt tttataaaaa acccagtctt tgctgaccag 60
acaaagcata ccagatetea ccagagagte gcagacacta tgetgeetee catggeeetg 120
cccagtgtgt cctggatgct gctttcctgc ctcattctcc tgtgtcaggt tcaaggtgaa 180
gaaacccaga aggaactgcc ctctccacgg atcagctgtc ccaaaggctc caaggcctat 240
ggctccccct gctatgcctt gtttttgtca ccaaaatcct ggatggatgc agatggctct 300
gagcctgatg gagatggatg ggagtggagt agcactgatg tgatgaatta ctttgcatgg 360
gagaaaaatc cctccaccat cttaaaccct ggccactgtg ggagcctgtc aagaagcaca 420
ggatttctga agtggaaaga ttataactgt gatgcaaagt taccctatgt ctgcaagttc 480 aaggactagg gcaggtggga agtcagcagc ctcagcttgg cgtgcagctc atcatggaca 540
tgagaccagt gtgaagactc accetggaag agaatattet ceccaaactg cectacetga 600
ctaccttgtc atgatectec ttetttttcc tttttettca cetteatttc aggettttet 660
ctgtcttcca tgtcttgaga tctcagagaa taataataaa aatgttactt tatacttaaa 720
aaa
                                                                         723
<210> 110
<211> 1049
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2484647CB1
<400> 110
ageogetyte tegaacteet gaceteagyt gateegeeca eettytaete eeaaaatget 60
gggattacag gcgtgagcca ctgcacctgg ccccatcttt ctacaactgg gaaaattctg 120
agttetggaa ceatetgeee agggatttgg ggteagagat ggtgggeett tetgateetg 180
gtctttgcca tggttatgat tgtggcatcc ctgcctgtct tctatcatgt gcctcagcct 240
gtttttttc ctttgccagg ctgcaagccc ctgatatcag actaacagga gcacaacatt 300
gcacggtcta aagacactac attagggtga aattttgttc ttctatcttc cccccttgca 360
tggagaggac ceteatteet gececeace tegetteact gtgccaggca caggcagage 420
ccaggtgctg cctctgcttg tctgcagttg ccgacgaggc ctgcgctgag cattttggca 480 agtctggaga attgaaggcc caggcccttg gccctatcac cgcaatgcag gcccagaggt 540
ggcaggcggg agctcaccga tggatctgcc agtgtcagtc ccagagcgga ccccagaagt 600
gttcaggegt ggactcgcac tgtctgacat ttccatcgat ggcctgcatg aggaatgggc 660
ggtgagcatc ctccttccat ctccagctgg gggtggaggg tgtgagcctg cccgccgaga 720 ggaagccagt tacagaatca aaatgactca ggctgggctc tgtggtgcgt gtctgcagtc 780
ccagctgctc tggaggctga ggcaggagaa ctgctctagt ccaggagttt gaggctgcag 840
tatgctatga tcatgcctgt aagtagccac tgcactccag ccagggtaac acagcgagac 900
cttgcttctg agccagcaaa ccttcgctgt tgctcctact tgcttccaaa ggcagttcag 960
tgtctggccc cactgtcttt ccagggtgtc ctcctcctcc cggaacacaa ctggctgccc 1020
accggctggg cgcggtggct cacgcctgt
                                                                        1049
<210> 111
<211> 360
<212> DNA
<213> Homo sapiens
<221> misc_feature
<223> Incyte ID No: 2587034CB1
ctgggaagaa gaggaaaata tatttagacg aacaaccaga aatctatttc tattctctgg 60
aagagettgt ataagataag aaataettga ateatgggtt tttttaatta ettgacetat 120
tttettgetg etggtgetgt cactttggga attggtttet ttgetttgge atcagetttg 180
tggttcctga tttgcaaacg aagagaaata tttcaaaatt ccaaatttaa agcaattgat 240
gagagatgca ggcaaagacc atcaatggcg aagattaaat ctcattctca gtgtgttttt 300
atttctcgaa attttcatac tgggagattc caattacagt tttgaaggct gagaagtcca 360
<210> 112
<211> 1466
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<223> Incyte ID No: 2702991CB1
cagaagggaa aacccactca gtggaaggca gcccccagga gccttcggag ggggaggccg 60
gaggetgeat geggetgetg gggeeceggt tecagggegg gtgggggaec categtetga 120
tgccaagggg cgtggtaggg gcggctgcct cgcagtgtgc ggtggtcagg gctggcaagg 180
cctggggcct gggctccaga cccctaggga aggtggaaat ggaggaccct gacatcctca 240
cgtccccggg gaagctgcca catgagccgg ccccaccggt ccaagtgtgt gagctacact 300
teagecgtee acgtecagee caggaggeet ecgeetteee etteettgtt cetgattetg 360
teteccagat ggcccgaggg gggcctggga aggcgtgggg tgggggggta ctggaggagg 420
ggcctgggga gggttcaaca cagaattggc cctgtggctt ccttcaaccc gggctgttgg 480
gctggcgtgg gaacagcaag gagccccgag tcctgccctt caacaaccaa tqtqgcgctq 540
gcctctggag gaggccggcc gggaggcagc gggagctggg cacctgattc ttggcagctg 600
ctgagaaggt gtgaaaggaa aataaatctc cggaccccaa aatcactcag ccaagagaaa 660
aatcaagctg ggaattaggc aaacctgcct cccgttttat ttctaaataa catagttaca 720
atgataagaa gctacacgcc tccctcataa ttagcgtcca gggaaattcc ttgtggacaa 780 aggacagacg gaactggaag tcatccctct ggggctcccc tgagacaaac gcttatatga 840
ttgccccgtt cccttactgt ttacataaaa atgcggattc actgggccag actcaatcgt 900
gtattcagtg gaaggctgac tgaaccaatg tacgccatac acatactgat cttgtgtctc 960
cctaagatgt ataaaggcaa actgtatccc cagccacctc aggcacctgt tgtcaggacc 1020
tcctgaggct gtcacaggtg catccttaac cttggcaaaa taaactgaga ctggtctcag 1080
atatttgggg ttcacaaagg cgtgagacgg cagggtcctg aggtctgagg cgccgtgggc 1140
gaggaggagg gtcctgaaat ctgaggcgcc gtgggcgagg aggagggcca agcacacgcc 1200
agggtcaggt cctgggcagg tggaattgtg cagtcccct gcgtctgcag gtgctgtctg 1260 tctggcttgg gcagggttgg gggaggaccg aggccagagc catccttcct ccaggcactt 1320
gcagggccaa ccggagattc taggcctggc ctgagtctgc gcaggtgcta gtgggaccag 1380
aggeacttet tgggaatgga ttetggaggt gteagacact teectaactt tteacagece 1440
ggaggtgccc agttctggga aatgaa
<210> 113
<211> 1724
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2744736CB1
<400> 113
cttcacacta tccagaaacg gaatgatgac acgatgaaag cctgtggggt cccatcacgt 60
cacgtcacgt cacgtcacct ggagttactt ctgtatttct tgctaaagca gggagctttt 120
gagtgcccac ctgcgtgatt ttcatgccaa gggcacctca ttcccaggca gggctggctg 180
ccgtgggcgc ctcgagcctc ctccttcccc ctcatgtgtg tgggagtctg tggggcctat 240 accacgtgcc tgttgcagtg gtgtgtgtcc gaggtccctc ccatgcgggt gccccctctg 300
teettgetgt gggttgggag ccageteeet getgecagge cccaetggg acettgtggg 360
tgtgtccagg catctgcagc cgcccccac cgcctccccg gtccgtttct ctgcacaacc 420
acagccgcac tgaggcccgt ccaggtctgg gccggtcagc ctaggggtgg gaaccctgct 480 caagagggct gtgggcacgt ggatggtagc agcctcaggt ggtgtggcct agggccagga 540
teccatggag gtaaaaaatg geecegeeg etecegeeac gttggeeacg tggatggeea 600
cettetcagg etgttgcaca ggttegeett eccagggaag acaggagatg etetgggeet 660
teeettteee tgaeggegge gteatggete accaegggtt caggegttag etgetattga 720 etgtgaacce gtggatttag gtategtggt tttegggggg atgtteaegg teetggteee 780
catatgtccc tttccgtgtt ccttatccca tgctggaatg ctcttaggag gaatcccgga 840
gttggaactg ccctgctggc gtggattcta agaatcctgg cactgcctgg cctccctgga 900
ggtgtgtgag ggcgcgtctg tgcgcacgag ggacagggca gggattgcag tgactggggg 960 atgacgggac cccctgccac gctctgccac agtcttcacg gccatgggaa gagctgcgct 1020
cacttatact ctcacgttaa cggagetcac aggcagatce tctccgtccg acagcccttc 1080
ggctgggggg tctggggcag cctcagacag gagcccgctc ttgcggacgg gaggacgagc 1140
gcaccetgcc cccgctgctc tcagcgagcc tttggctgtg acttagctgc attggttgcg 1200
agggctggag ccagccgcag gccccgcctt cccttggctg cctttggggc tgcactgccc 1260
tggggagccg tattctcctc catcgtggct atgttagtgt gaaattagag aaatctgggc 1320
aaatcttttt tatttatttg ttttttaatt tttatttatt ttttgagaca gagtgagact 1380
gcacgggggg gaaaaactaa cagaagtggg ggggcccccc aaaagggggg ggcggaacat 1560
```

```
aaatgcgaaa agccgggtta ccccggttat gatagaccgg ggacaaagca tgaagagacg 1620
cagacgagca gcaagcagca acgacgagag tcgactacca gacacacagt gcgcgcagaa 1680
ctacgtgaca cgacacagac aacagcatag gcggccgacc acga
                                                                    1724
<210> 114
<211> 778
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2915475CB1
<400> 114
attetgatet ttetgegtga etgageetge tttgtgaaag eteattetet ggettgaage 60
catctattga ctcttgtcac cagaagaata aaatgcatgc tccacaaagc cttgagtgcc 120
gaccatcatg gacctoteca coteatotec acatgettee tetetatett coacttetee 180
tgactttgtt aggtgtctca aatgctcaag agctaactcc tgtctcaggc ctttgctgtt 240
tttegttttt tgtttetggg acagggtgtg attetgteac ccaggetgga gtgcacttgc 300
totttettgt gtctgtaatg ttctttttcc tgctctctct ctttttaatt ttatttttgc 360
tatttactta tttattagag acagggtete actetgteac gtaggttgga atgeagtggc 420
gagatcacag ttcactgcag cctcaacctc ctgggttcaa atgatcctcc caccttagcc 480
teetgagtag etgggaceae aggaatgtge eacetggeta atttacattt ttttttttt 540
tgggtagaga cagggtctgg tcatgttgtc caggctggtc tcgaactccg gggctcaagc 600
catcetteca ceteggtett ccaaatgatg ggattacaga etatgagtea etgtgeccaa 660
cetettecta etettatgg atgaattet taacetgggg tetcagettt teageattt 720
tccatctcat cagagatgat ctttcctaac caccaaatta aaatgattta tttaaaga
<210> 115
<211> 1974
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3040427CB1
<400> 115
gagagccaga ggagagaggg tcctgactct cagagaggga ggaaaagaga aaaatggaaa 60
aggagaacaa cctgtgatcg tatgttcagg tcaaatgagt gtgagaggct acagactgag 120
gtcggatgag agagcaattg gtcttggctg gaagaatcct gaggtgacat ttgaacctgt 180
cctggaagga agttggagat ggacagatgg aaccagtagg agcggaggct gtggtacagg 240
aagaggetgg cagagcagga ggggagcact gtgacagcca aggcactggg aggcgcactg 300 ctcctgatgg tccagcactg ccctcccagg actgaggctg cgccttgtga gggctgtctc 360
aagatattga tgaccatgag atccctgctc agaaccccct tcctgtgtgg cctgctctgg 420
geettttgtg ceeeaggege cagggetgag gageetgeag ceagettete ceaacegge 480
agcatgggcc tggataagaa cacagtgcac gaccaagagc atatcatgga gcatctagaa 540
ggtgtcatca acaaaccaga ggcggagatg tcgccacaag aattgcagct ccattacttc 600
aaaatgcatg attatgatgg caataatttg cttgatggct tagaactctc cacagccatc 660
actcatgtcc ataaggagga agggagtgaa caggcaccac taatgagtga agatgaactg 720
attaacataa tagatggtgt tttgagagat gatgacaaga acaatgatgg atacattgac 780
tatgctgaat ttgcaaaatc actgcagtag atgttatttg gccatctcct ggttatatac 840
aaatgtgacc cgtgataatg tgattgaaca ctttagtaat gcaaaataac tcatttccaa 900
ctactgctgc agcattttgg taaaaacctg tagcgattcg ttacactggg gtgagaagag 960
ataagagaaa tgaaagagaa gagaaatggg acatctaata gtccctaagt gctattaaat 1020
accttattgg acaagggctt gcttcaagca tctgtattag tctgtattaa tgctgctgat 1080
aaagacgtac ccgagactgg gaagaaaaag aggtttactt ggacttacag ttccacatgg 1140
ctggggaggc ctcagaatca tggcgggagg tgaaaggcac ttcttacatg gcagcaagag 1200
aaaatgagga agaagcaaaa gtggaaaccc ctgataagcc atcagatctt gtgaaactta 1260
ttcactatca caagaatagc atgggaaaga ctggccccca tgattcaatt acctccctt 1320
gggtctctcc cacaacacgt gggaattctg gtagatacaa tttcaagttg agatttgggt 1380
ggggacatag ccaaaccata tcagcatcct ttcaagaata ttagataatt ggagctgagt 1440
actcaggaac ttgactgtag tagaatactg ctagtttctt aattttaatt cacatcacct 1500
gaaaagtaaa acaacaggct ttgccaagtg gatgcttttc agtaacagtg aagtggagtg 1560
aataccagat gtttgccctg gtgggttcct atctccttca ggcaaacatg gtcagtattc 1620
tgtaaagttc ccctggccta aatgattact tgctctgggc aagtggatat ttattaggct 1680
atttcaaagc cacagcataa gaatgtcagc ctagccacag agtctgagat tctgagttca 1740
```

```
gcctagccac agagtctaag attctgtatc ctctgacatt tggaaatgat acactgctgg 1800
 cttaagtgat gactetttea gatttteagt attttataca agtactgeea gateettata 1860
 ctttatgggt tttctggtct tcttcaaact ggcgagaaga ccctgaattt gagtgtgttc 1920
 tctaatcaat agtgggttta gagtttcttt tttatttcac tcggtttcta gggt
 <210> 116
 <211> 990
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Incyte ID No: 7499722CB1
 <400> 116
 ctgggaagaa gaggaaaata tatttagacg aacaaccaga aatctatttc tattctctgg 60
 aagagettgt ataagataag aaatatttgt atcatgggtt tttttaatta ettgacetat 120
 tttettgetg etggtgetgt cactttggga attggtttet ttgetttgge atcagetttg 180
 tggttcctga tttgcaaacg aagagaaata tttcaaaatt ccaaatttaa agcaattgat 240
 gagagatgca ggcaaagacc atcaatggcg aagattaaat ctcattctca gtgtgttttt 300
 atttctcgaa attttcatac tgggagattc caattacagg aggagcaaag aaaaaaggaa 360
gcagcacata taaaagcaat taaagatcat tctaaagatg aaccccaact tgcaacaaaa 420
 aatatcattt gtgatccctc agagaccagc tccacaacaa atcgcagcag tgttacatta 480
 agettateaa cattaceate tgattettat tacagecaaa gtatagaage agetgatgae 540
 tggttttctg atgattctct agtgaaaagg aactctccaa tgccttctct cggggaacct 600
ctaatggaaa aagtattttc atacctgtca accatttcat tagaagaggg tactgaaagt 660
gtactgaatg acactttatg accatcaaaa agatgactac attaagggaa aatgttcatg 720
aagaaacaca gaggttgaaa tataaaacct tcaacataat actgaatgac tttttcttt 780
 tgaaaccttg tatacaatca gettetgagt etettaacat gteeatgeta atattgettt 840
ttttgttctt taccatagag cggctctact tcccttgctg gttcttattt ctagaaacaa 900
aattaggaag aactagagtg atgtcatgaa cattaagctt aacttattgt atctcatcca 960
aagacatatt aaataaaatg agtgtatgtc
<210> 117
<211> 951
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6776909CB1
<400> 117
ggctcaaagc attcggtgat ttgagctaga ggaaacgcat tcacattttt tccctcatac 60
tgttctcttt catgaacttt atttccacaa ccttatataa tgtggatctc tgggaagcat 120
ggtgccaaaa ccaaggtgtg tgctagggtg gacgccaaca ccgttgaacc tggtgctctg 180
geetggeegg geetetggge aegeteeatg etectgeegg tggetteeeg cageatggeg 240
gagaggcgca gtgaagcagc tetttcactc tgcgggcagg caggcaacac ctggccttgt 300
tattcctgtc cctcactgct cctggaattc agatgccgac ctcacagcag ctggccgccg 360
cggagtcagc ggtcacagaa aggattaaca cacatcttgg ctgcgattct gcaagtagcc 420
gaaagagtat cttgaagcgg aagatgaaaa caccctttat gttcaatctg cagaagtttc 480
atcttaaata gagcaagtgt tactttatgt ttaaaatgcg atgccacatt ggtttgtttg 540
ctcttagttc ggtaacctac tttttcagaa attacatttg aaaaggggga aaaaaaaaac 600
ccggagggtg gggcgaagca ggcacagcct ggactcagaa gaagcaaagc taagcatgcg 660
ccccaataag aaacacacca ctgtgctgtg cacactgggg cgcctgcttc ctttttcccc 720
cggttacgtt tggagtcacc cttttgggaa gaaactcagc gccgtcatta cagtactgtg 780
attcagtctg aataagtggc aatatacacg tatttcaaaa gcaggaactc aacataactc 840 gaagacattt tctgccatca atttttcctc aatattcgca gaaataattc acacagagtg 900
ttagagetet geaagagett gtetageagg ttgtggaaat eteeaacaaa a
<210> 118
<211> 1106
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<223> Incyte ID No: 7280438CB1

```
<400> 118
gggaggcacg tgactgggat tataattcgg gcccgggggg aggggaggga cggccgcccc 60
ccacctgccc gggaggggcc gggagctggg agctgtcacc ccctccctcc ttgccaccgg 120
ctcttctgga ggtgggggc gtcccgggcc ggcgcccgca ggctgctgca gttggcgaat 180
gaggtcagtc gcgctgcccg cggtggcggg cgccggggtg ggagcagagg gggctgggaa 240
ggccgcggtc cccgcctttc cccctccac cttctcccgg tctgggccag cccctggccc 300
gegeeceaa eteccaggeg gagtecagte cagecaggat tgeeceagea gggtggttee 360
tgtagtggac cccccgccc ggccccgggg agggggctgg cctgtgtggt ggtggccgct 420
gaatcccggg tggaggggac tcagaaggtg gcagtggggg gaccacaaag ggttcagagg 480 agtaagttgg ggatactcgg tctgtgggtg gtctctgagt tcctgcagat gggtggagag 540
gacagaggag gggccacagg gtgctgaaca cccacccgcc ccatcctaag taccctgggc 600 atgatgggct tgacacctct cctgggctcc tcacccctgg ccagcagcca gggagtgaga 660
ccctgcctcg cctggcgtgg gcccagggaa gggggccgct gtgccgctga gagttcgttc 720.
caccetectg geagtgetgg agggggetgg agetetggeg tetggeetag tgaccetace 780
teccaggace aaggteetge ggtgggagte teetgtgtee ceateceage tgaagegagg 840
gtgctgggac ataggggtct cgctgcaggg cctgtgaggg gagcactgac tcttggatgg 900
ggtgtcttag aagccaccct ggcgcgccgc tgccatggtc ggcctctgtg tgtctggctg 1080
ccccgtggcc aggactgttg actcct
                                                                    1106
<210> 119
<211> 2026
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499809CB1
<400> 119
cggagctgtc ccatttaccc gacccgacgc cggcgtgatg tggcttccgc tggtgctgct 60
cctggctgtg ctgctgctgg ccgtcctctg caaagtttac ttgggactat tctctggcag 120
ctccccgaat cctttctccg aagatgtcaa acggccccca gcgcccctgg taactgacaa 180
ggaggccagg aagaaggttc tcaaacaagg aatccattac attgggcgta tggaagaggg 240
cagcattggc cgttttatct tggaccagat cactgaaggg cagctggact gggctcccct 300
gtcctctcct tttgacatca tggtactgga agggcccaat ggccgaaagg agtaccccat 360
gtacagtgga gagaaagcct acattcaggg cctcaaggag aagtttccac aggaggaagc 420
tatcattgac aagtatataa agctggttaa ggtggtatcc agtggagccc ctcatgccat 480
cctgttgaaa ttcctcccat tgcccgtggt tcagctcctc gacaggtgtg ggctgctgac 540
tegtttetet ccatteette aageateeae ecagageetg getgaggtee tgeageaget 600
gggggcctcc tctgagctcc aggcagtact cagctacatc ttccccactt acggtgtcac 660
ccccaaccac agtgcctttt ccatgcacgc cctgctggtc aaccactaca tgaaaggagg 720
cttttatccc cgaggggtt ccagtgaaat tgccttccac accatecetg tgattcageg 780
ggetggggge getgteetca caaaggeeae tgtgcagagt gtgttgetgg actcagetgg 840
gaaagcctgt ggtgtcagtg tgaagaaggg gcatgagctg gtgaacatct attgccccat 900
cgtggtctcc aacgcaggac tgttcaacac ctatgaacac ctactgccgg ggaacgcccg 960
ctgcctgcca ggtgtgaagc agcaactggg gacggtgcgg cccggcttag gcatgacctc 1020
tgttttcatc tgcctgcgag gcaccaagga agacctgcat ctgccgtcca ccaactacta 1080
tgtttactat gacacggaca tggaccaggc gatggagcgc tacgtctcca tgcccaggga 1140
agaggetgeg gaacacatee etettetett ettegettte ceateageea aagateegae 1200
ctgggaggac cgattcccag gtggagagtg tgactgcagg atccccactc accaaccagt 1260
tetatetgge tgeteceega ggtgeetget aeggggetga ceatgacetg ggeegeetge 1320
accettgtgt gatggcctcc ttgagggccc agagccccat ccccaacctc tatctgacag 1380
gccaggatat cttccccact tacggtgtca cccccaacca cagtgccttt tccatgcacg 1440
ccctgctggt caaccactac atgaaaggag gcttttatcc ccgagggggt tccagtgaaa 1500
ttgccttcca caccatecet gtgattcage gggctggggg cgctgtcctc acaaaggcca 1560
ctgtgcagag tgtgttgctg gactcagctg ggaaagcctg aagggcagct ggactgggct 1620
cccctgtcct ctccttttga catcatggta ctggaagggc ccaatggccg aaaggagtac 1680
cccatgtaca gtggagagaa agcctacatt cagggcctca aggagaagtt tccacaggag 1740
gaagctatca ttgacaagta tataaagctg gttaaggtgg tatccagtgg agcccctcat 1800
gccatcctgt tgaaattcct cccattgccc gtggttcagc tcctcgacag gtgtgggctg 1860
ctgactcgtt tetetecatt cetteaagea tecacecaga geetggetga ggteetgeag 1920
cagctggggg cetectetga getecaggea gtactcaget acatettece caettaeggt 1980
```

2026

gtcaccccca accacagtge cttttccatg cacgccctgc tggtca

```
<210> 120
<211> 2169
 <212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499921CB1
<400> 120
ctggcagtgt catggctgcc cacaggtctg caggcactcg gtacgccgct aacgcggcga 60
ggtagetegg tgegtetege ggtaceagtg egaateateg ggetateeag gteegagate 120
ctagtctcct gtcggctctg aggaggatgg atccttctgc ggatacatgg gacctcttct 180 cacctttaat atcattatgg ataaacaggt tttacattta tttgggcttt gctgttagca 240
ttagcctttg gatttgtgtc cagattgtca tcaagacgca gggcaagaac ttacaggaaa 300
aatetgttcc aaaagcaget caggatttga tgacaaatgg ttatgtctcc cttcaagaga 360
aagacatctt tgtgtctgga gtgaagattt tttatggttc tcagactgga acagcgaagg 420
gattegeaac agttettget gaageagtta catecetgga tetgeetgtg gecattatta 480
atctaaaaga atatgatcca gatgatcatc tgatagaaga ggttggcaaa aatgttgaca 540
agtggctctg gatgcttggc gcgcatcgtg tgatgagtcg aggggagggc gactgcgacg 600
tggttaaaag caagcacggc agcattgagg ccgacttcag agcatggaag accaagttca 660
teteccaget geaggeactt cagaaagggg agagaaagaa gteetgtgge ggeeactgea 720
agaaaggcaa atgtgaatct caccaacatg gctcagagga gagggaggaa ggatctcatg 780
agcaggatga attgcatcat agagacaccg aggaggaaga accetttgag agctccagtg 840
aagaagagtt tggtggtgag gaccatcaga gcctaaattc cattgttgat gttgaagatt 900
tgggcaaaat tatggatcat gtgaagaaag aaaagagaga aaaggaacag caggaagaga 960
agtetggttt gtteaggaac atggggagga atgaagatgg tgaaagaaga getatgataa 1020
ctctgctct ccgagaagcc cttactaaac aaggttatca gttgattggg agccactcgg 1080 gggtgaagct ttgcaggtgg acaaagtcca tgctccgagg gagaggaggt tgttacaaac 1140 acacattcta tggaattgag agccatcgct gcatggaaac caccccgagc ttggcgtgtg 1200
ctaataaatg tgtcttctgt tggcggcacc acaccaaccc cgtgggcact gagtggcggt 1260
ggaagatgga ccagcetgaa atgatettga aggaageeat tgaaaaceat cagaacatga 1320
ttaagcagtt taaaggagta ccgggcgtca aagcagaacg ctttgaagaa ggaatgacgg 1380 taaagcactg tgcattgtcc ctcgtgggag aaccaataat gtacccagag atcaacaggt 1440
ttttgaaget actccaccag tgtaaaattt ccagetteet ggtcacaaac gcacaattte 1500
ctgcggaaat caggaacctc gagccggtta ctcagctgta tgtcagtgtg gatgccagta 1560
ccaaagacag cctgaagaaa atcgaccgcc cactcttcaa ggatttctgg cagagattcc 1620
ttgacagttt aaaagccttg gcagtcaagc aacaacgaac tgtctacaga ctgacgctcg 1680
tgaaagcatg gaacgtggac gagctccagg cctacgcgca gctcgtgtcc ctgggggaatc 1740
ctgacttcat cgaagtgaag ggcgttacct actgcggaga aagttcagca agcagtctta 1800 ccatggccca cgtgccctgg catgaggaag tggtacagtt tgtccacgag ttggtggatc 1860 tgatccccga atatgaaatt gcatgtgaac acgaacactc taattgcctc ctgatagcac 1920
acagaaagtt taaaattggt ggtgaatggt ggacatggat cgattataac cgcttccagg 1980
agctcatcca ggaatatgaa gatagtggtg gatcaaaaac gttcagcgca aaggattata 2040
tggccagaac tcctcactgg gcattatttg gtgccagtga aagaggcttt gatcccaagg 2100
acacaagaca tcagagaaag aacaaatcaa aggctatttc tggatgttga gattatctga 2160
tttcaaggt
<210> 121
<211> 852
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2705858CB1
<400> 121
attatgctga atgaaaaaag gcaatctcaa aaggtcactg ttaggttcca ggtaggtggg 60 acatggcttt attcagcagt ttcttcacac tgtcggtgct gcatttatgc acctcacaga 120
ccataatggc tcagaggcag gtgatgagcc ctcccacgtt atggctacat agctgtgatt 180
atgtaatgca tgggattgtg cgcctgtgct ccaatcccac tgtgtcatac tgtgcaggat 240
gtgtacctca gcctatactt gactgcagca cagccattgt ccttacaatc acatactgta 300
aggacagtat gtgattccat ttatataata gtctcaaaaa tgataaaaag atggagaact 360 gattggtgct gtacaaaggt tagcagtgtt ggtgagggga gttgtgacta taaagaggta 420
gcataaggaa gatatttgtg gtgatggaat agttccattt ctggattgca gtggtggtta 480
```

```
caagaataca gacgtgatta aatggcatag aattacacat atgctttgca ccaatgccaa 540
tttcctgatg ttggtatagt actatagtta cataagatgt atccattaga aaaaattgag 600
tgagagtttc acaggacctc tctgtattta caacttcatc tgattctaca attatatcga 660
taaaatactt cttaaagtag cttacagtgg agaaacctgg cagaaatctc cttaaccaag 720 gaatcaagac taacatcact ggtaagttta tgttcatatc ttgaacccct tatactgtgt 780
cataagaaac gcacttcacc tctgtgctat ccttccccct tttacagcag cagtgcgatg 840
atatcaatcg cc
<210> 122
<211> 1245
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3069892CB1
<400> 122
ctgggtcaca gtttggggaa gagaatgctg aatgaacact ggttggagca gcaacaaagg 60
tttcccttgc atactgtgcc tgccagccat gggagctcag gctcaagtcc tcccacctct 120
ttattgctac tggtttgtca ccattctgct ggcgagaatg gtagtgagca gcagggagga 180
agccacagag tttcccacca gagaaactgg actgtcccgg catgatttgc atactttggc 240 acaaacacca gaggatactg accttgggcc ttgatgtcac tacaccagac aattggttga 300
actgatatgc tttacttgcc ttgactaaca ttgtgttttg ccaattgcc aattgtttag 360
tggccaagga gactcactga ctttagattt gaattcagta aacattttt atgtgattta 420
ctttgtgcca gacagtattc tggtcactct ggcacttttt atctcattta ataatcataa 480 tattttagaa ataagttgat atttttattt taaaattatt aaaccaaggc cctctatttc 540
atgctgtggc tctcctgaat tcaaggagaa atatgttaac gttaaaaaaa ataaaattgt 600
atcacataat gtgacataaa gatgagggca tcatctttta atagatatat attattgtta 660
aaaatgttaa ttaggtattg aaaattataa caaggacatt tcaccagtga agtggtgtaa 720 gggcagggaa gttggggcaa tgggaattgg aatataatga gccacattaa gcatacacat 780
gtcaagtcta gttctgaatc ctgtggcagg ccttacaaga gagtccatga gtcagagagg 840
tgcaaataga accaggaatt tgcattgttg tggatgcaaa ggaggaggaa gtgttcaaca 900
ttgtcagatg tagaagagag gtctagaatg ataaagactg aaaatagcca taggactttg 960
cagatgggag gtcaatgctg accttaccaa gagccccttc catgaaattg aaagggcaac 1020
aatagtccag tccttccaaa ggttgtgctg ggaagaagag tggtttctag agggaacaca 1140
tctgtaagga agaggtattt cttcaagttt aaggaaatgg agcatctcta gcataactac 1200
tggagtctga aagaaaaggg agagaatggt ttgagatata ggaag
<210> 123
<211> 1924
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3069586CB1
ccgcggccga tcctgttgcc cctccaaaat ctattgcttt agattgcaga gcccaagcct 60
ttcattgatg tgagtgtcat cacaagattt aatgagtaca gtaaagtctt acagttcaag 120
tattttatgg teeteattea ggaaatggee ttaaaaattg atcaagggtt tetaggaget 180
attattgcac tgtttacccc aacaacagac cctgaagctg aaagaagacg gacaaagtta 240
atccaacaag atattgatgc tctaaatgca gaattaatgg agacttcaat gactgatatg 300
tcaattctta gtttctttga acatttccat atttctcctg tgaagttgca tttgagtttg 360
tctttgggtt ccggaggtga agaatcagac aaagaaaaac aggaaatgtt tgcagttcat 420
tetgtcaact tgctgttgaa aagcataggt gctactctga ctgatgtgga tgaccttata 480
ttcaaacttg cttattatga aattcgatat cagttctaca agagagatca gcttatatgg 540
agtgttgtta ggcattacag tgaacagttc ttgaaacaga tgtatgtcct tgtattgggg 600
ttagatgtac ttggaaaccc atttggatta attagaggtc tgtctgaagg agttgaagct 660
ttattctatg aaccetteca gggtgetgtt caaggeeetg aagaatttge agaggggtta 720
gtgattggag tgagaagcct ctttggacac acagtaggtg gtgcagcagg agttgtatct 780
cgaatcaccg gttctgttgg gaaaggtttg gcagcaatta caatggacaa ggaatatcag 840 caaaaaagaa gagaagagtt gagtcgacag cccagagatt ttggagacag cctggccaga 900
ggaggaaagg gctttctgcg aggagttgtt ggtggagtga ctggaataat aacaaaacct 960
gtggaaggtg ccaaaaagga aggagctgct ggattcttta aaggaattgg aaaagggctt 1020
```

```
gtgggtgctg tggcccgtcc aactggtgga atcgtagata tggccagtag taccttccaa 1080
ggcattcaga gggcagcaga atcaactgag gaagtatcta gcctccgtcc ccctcgcctg 1140
atccatgaag atggcatcat tcgtccttat gacagacagg aatctgaggg ctctgactta 1200
cttgagcaag aactggaaat acaggaataa atgtttccta aactactact tgatttcatc 1260
cttaaaaatc aaaacaaact gtggtgttaa ttgactgtgt gtgaattcca ttgtcaattt 1320 taatgaaatt ttctttaaaa ctctcacctc catctgaact tttcatagta gtgggattga 1380
ctacaaataa aaacttgtgg tattcctggt aatactgtcc agaaataaga gattagtata 1440
aaatattaaa ggatgcagag aatcagctct cttctgcgtt taatagatga aagcctttat 1500
tgagctcaga agcagatact gttactatca tttcgaaaat tttatcttat ggtgttcatg 1560
tgcatttcag gtaaaattga aaaacaggac aattattatg tccaattaat atgtttatgt 1620
ttgtgagtct tgatgatgga attacatagc tttctgtttc acaaatggct ctaaatttgc 1680
ttaagttacg ggactattac ctggagcatc tgctttaata attgaattgt cagttgctct 1740
gagcctgcct tagacctcaa gtaataaaat agttggcaca tgaattttga ggatatgttt 1800
cctcttccct ctttttccta ttaacccttg gtactgttgc taaataatga tagccatttt 1860
ataattatgt tatatacatt ttcagccttt agcatttctg cttttcaaaa attgaatctc 1920
cttg
<210> 124
<211> 559
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500104CB1
<400> 124
gtgacaccag agectectge aagatgette tgattetget gteagtggee etgetggeet 60
tcagctcagc tcaggattta aatgaagatg gaggagactc tgagcagttc atagatgagg 120
agcgtcaggg accacctttg ggaggacagc aatctcaacc ctctgctggt gatgggaacc 180
aggatgatgg ccctcagcag ggaccacccc aacaaggagg ccagcagcaa caaggtccac 240
cacetectea gggaaageea caaggaceae cecaacaggg aggeeateee cetecteete 300
aaggaaggcc acaaggacca ccccaacagg gaggccatcc ccgtctcct cgaggaaggc 360 cacaaggacc accccaacag ggaggccatc agcaaggtcc tccccaacct cctctggaa 420
agccccaggg accacctccc caagggggcc gcccacaagg acctccacag gggcagtctc 480
ctcagtaatc taggattcaa tgacaggaag tgaataagaa gataacagtg tttcaaatgc 540
cgtgaaacat ggcatcatg
<210> 125
<211> 653
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500203CB1
<400> 125
ccagacaaag cataccagat ctcaccagag agtcctaggg gactacagaa ggaaaaagac 60
aagaggcagt aggatatetg tgtgtcctcc cgctgaccac acttccttta gtgacccgat 120
tgcctcctca agtcgcagac actatgctgc ctcccatggc cctgcccagt gtgtcctgga 180
tgctgctttc ctgcctcatt ctcctgtgtc aggttcaagg tgaagaaacc cagaaggaac 240
tgccctctcc acggatcagc tgtcccaaag gctccaaggc ctatggctcc ccctgctatg 300
ccttgttttt gtcaccaaaa tcctggatgg atgcagatgg ctctgagcct gatggagatg 360
gatgggagtg gagtagcact gatgtgatga attactttgc atgggagaaa aatccctcca 420
ccatcttaaa ccctggccac tgtgggagcc tgtcaagaag cacaggattt ctgaagtgga 480
aagattataa ctgtgatgca aagttaccct atgtctgcaa gttcaaggac tagggcaggt 540
gggaagtcag cagcctgagc ttggcgtgca gctcatcatg gacatgagac cagtgtgaag 600
actcaccctg gaagagaata ttctccccaa actgccctac ctgactacct tgt
                                                                      653
<210> 126
<211> 1649
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<223> Incyte ID No: 4843802CB1

```
<400> 126
gtcaacgttt cacgtcccca aacccgtctc agggtaacac ttgacctaca gtgtcaagat 60
gaaattgact ctgcaaccac acaggtgagt gaaagaaaac attggcggca gcaggttggt 120
ttccacagec eggeeceagg eccaggteat ggtgettaga ggaggageet eagetgagaa 180
tgaagggtgc cagggatgct tctccatccc tgtcatgggc agctgctgcg gttggatctg 240
ccctgggaag ggcaggagag ggcacctcga tggtcgggtg caagaagcca ctgggtcagc 300
agatececeg gecettecee acatgiteaa cetettggee tetgggetge titetecace 360 tggaacatte tiectecaga aagecacgtg geteactete tgactieete caggaagtga 420
gettactaac egggeegtee etgaceacte aggataaaag tgtgeacgee etgtecette 480
ctcccccaac tctgccccgt ccttctgatc tccccgcaca ctgctggtaa ctctcttatc 540
atctgtctcc ccaagtgtca gcttctgcag ggcaggggca gcatctgtct tgcatgctgc 600 tctaggccct cacacacagc aggtgctcaa taaatatctg ccgactggaa tggagtgaga 660
atgccagget caggtttctg gtatgctect aaattggtgg ceettgggee agtaacttga 720
cccttctaag catggattct acatctgtca gtttggccag tgagtctagc ccttgggtgt 780
ggaagtcctg aacaccaaat gtgtattgca cggccctgt gtacaggtgc taggtgccag 840
ggttgcagtt cacgtgtcag acgagcagaa gatcagagag cgaagcccac cttgtgtgcg 900
caggegaaag tgtggatget gtagggaggt geteatteae gtgggacceg etecatette 960
cgtggaacag ggacacttet catgecteec ttettactet gaggaaagga tteagagaaa 1020
ggaatccaag ctgggtacag tggctcacac ctgtaatccc agcacttaga gaggccatgg 1080 tgggagaatc tcttgagccc aggaattcga gaccagcctg ggcaacatag tgagacctca 1140
tctctacaaa aaaaaaaaa aattaaatta gacagccatg gttgcatcgc accttgcagt 1200
eccagetact tgggaggetg agatgggagg ategettgat cecaggaggt caaggettac 1260
agtgagccat gattggcacc acggcactcc agcctgggca acaaagcgag accctgtatt 1320
caaaaagaaa aaaaaaaaaa acggggcggg ccgcgcaat aagtggagct cgctcggaca 1380
ccgggagaat taaaatcccg ggaccgggac ctgcagggcg tgttcccagg gcacagtggg 1440
ggcgatgaaa tactcagaga tcggggccgg gtccccccc aaaagggggg acgcggtata 1500
aaatttccag taaaggccag gggtaacccg ggcaattaaa gtaggaccgc gagaacgcaa 1560 tacaacagca caacgaggca cgagacacgc acaaacagaa agagcccgga agaatggaga 1620
accaccaggg ccaagaacgc acgacaaag
                                                                            1649
<210> 127
<211> 1255
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<223> Incyte ID No: 5877522CB1
<400> 127
ctggccttaa tatataacca ccatcagaat gattgcatta atacattgtt ggttttttt 60
ttattcaatg aagtactttt aagcccgtgg ctcatttgga attgaagata taagacgaca 120
ataataacca tecetteece atggecagte actateetga etttggtatt tgteatteec 180
atgcatgttt tcacacattt acaacatatg tatccaaata agcaatatgt ggtgcttttt 240
atgaggtttt gaagtgeegt ggtttgeeac ggttactacg ggactgaatg aaggaggatg 300
aacgcagaaa tgaaaactta aaagaaactg ttttaaaaga aggggtcggg ggaagaagaa 360
gaggactccc tgcttctact gagcaaaagc agcagctctg agcttctaca gccctttgta 420
tttactgggt agaaagagca gggaagagga ggtaatgatt ggtcagctgc ttaattgatc 480
acaggttcac attattgcta acaggcttca gatgtaccta atcacaagaa aactgcgctt 540
agggagtggc tgccctccgc attccttctg ggcggcagat gcagtttgtc agtttgccaa 600
cattetgeat ttatgagaac agtttgetgt ttacccatgt agcetecagg atactgagtt 660
gatcacgacc ctcactcttt cagcctgcaa cattgaagct ttatataaat gcactatcct 720
gtctgtgtcc tcccataatg tgctcttttc actcattgtt aagtgtctga gatctattca 780
tgttgacata tgcaactgtg tgtcatgcat ttttaactgc tttaaactca ccattgggtg 840
aatacacagt ttatctgttc tcttcttgat gagcattggg cttttttaaa tttatgagac 900 tatttattct tttctcccca ggcttggctt ggactcatcg tcaacagcag cagcatcatc 960
atcatcacca tcatcatcat catcatcatc atcatcatca tcatcatcat caatggctga 1020
geocteactg tgetteetgg gageeggget cagetteeeg cetecaeggg cactacagga 1080
gggaacaaag tcacctgtca ggatcatgtg gaaagaggcc aagggtggat ttaacccagg 1140 tatgctgatg ctgaagtctg tgctcctaac cactctggcc ttctgcttcc tgtacccaga 1200
agagatggaa cccacaggcc accgataaaa gtctccaacg gtgtaaaata tcctg
                                                                           1255
<210> 128
<211> 1021
<212> DNA
```

```
<213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Incyte ID No: 617491CB1
 <400> 128
 caccagtaca ctccagcctg ggcaaccgga gtgagaccct gtctcaaaaa aacatgaata 60
aataaataaa taaataaata aataaataaa taaataaata agaagagcct tccagagcag 120
tatggaatgg ccaatgcccc tcctccctgc tgctcctcct cctgtagctg tttccttctc 180
 ccctctctcc ttgcttggaa cagccacagc gactctccaa atcatgacac tcaaaatgcc 240
acttetaaaa agaacatcag ggttggtgcc tctgcttctt ctgaattgac ctcccttctc 300
 tgccctcttc tgactcgtcc tcccttctct tttggatgta attctttcca gcctccacac 360
tcctttgaca gaagatgaaa aatttgtatc tctgaatcct atatctgctt gtctatgatc 420
taaatacttt ttgagtcaac aaggtgaaca tattcctcat atttcgttat ggaatgttta 480
aaacgtctaa aatacacact gccactgaga aagtaaattc atgcacctac aaagagaaag 540
gaaaggacag ccatccacca tttgactact gagtttccac ctgcaccctt cgacacttat 600
tagaactttc atgaaacagt gtgacaactc ttattcctat caaacaaaac agaactttct 660 tccttgtatg taaagaagtt tgcaccctct acaccgaata aggagatgca cagttccaac 720 agttattgta tacatcactg accatattag tcactcctca aaatccatca taggtccacc 780
aaatattctg ttaccttaag actacattgt aagattaaac tccaacaaca tgtatataca 840
acaaatgaat ggagagaaaa ataaaagtgg tgagcgtata atattaatgt gtacatatta 900 caaatatgca aagctactac cacacttgat tttgtaattt atcatgaggc cacgacacct 960
<210> 129
<211> 1167
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6289901CB1
<400> 129
agttgattac cacctagctg tttatacatc ttctgtttct cttggcatga gcacacagta 60
acaaatccaa taacctataa cgctgagaaa tctaacagaa aatatcagtc ttcgtttaca 120
cgcaacacaa gaagagcaca gggcccacac tgcgttggtg gcagagccaa aagtccaccc 180
tcatcctgct gaatgactgc aaagctgggc tcttcactcc cagatgacag tgtttctcct 240
cactcacatt cacccaccca cacagagcag aaagcaggaa ggtttccatg cccgcactga 300
cggtaagttg tgggaggcag tcgggcaaca tttctggagt tcctatgaat gatgtgctat 360
getttttgge etgeagaegt teaggtggae teagatetga gacatattea aaagtatgtt 420
tgcatcctgg cccttggttt atgtatttcc tcttccctag ggcattctac aaagcatttc 480
caaaaagget ggtecetgee cettaactgg tteeteetee tggcaacage attecagetg 540
gactttggga aatctcccta ctccttcaaa acaattgttt ctcccctggc ttcttttcag 600
gtttcctatg agtctatgag gtcactccac ccaatgtctt ccaaggaact gattatgctc 660
aggttagctg gtgacctcag aactctgacc agtataatga actgtgacag aaaggaatgc 720
atcetgttga ccaatecece tgeagtatag cacagacaac aggggtacta caaageteca 780
ttgcctagga gaaacagcca gcacctgtac tggctgagac atagaaactt caaaaacaat 840
tcaaatgtcc ataccactgc ccaaggccca atgatggttc atctgtttgt gtttttattt 900
atagatttac agaaatatag agatatttgg ccaggtgcgg tggctcatgc ctgcaatctc 960
agcactttgg gaggcagagg caggtggatc acctaagatc gggagtttga gaccagcctg 1020
gtcaacatgg tgaaacccca tctctactaa aaatacaaaa attagccaag cgtggtagca 1080
ggcgtctgta atcccagcta ctccaaaggc tgaggcatga gaatcacttg aacatgggag 1140
gtggaggttg cgagtgagcc gagatca
                                                                      1167
<210> 130
<211> 1045
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6817709CB1
<400> 130
```

```
tcacacacac ctggcttcaa tccctggttt catctctgcc cttaactaaa ccagctgtgt 120
gactttgggc aagtgactga actctctgaa actccatttc gtcatgcatg ctggggatgg 180
ctaacagtag teettacete acagagacae tacgaggatt aaatgatgaa atgcatggca 240
catgaccaac ctagagtaag tgtctgaatg tgcggtgatt ctatcagtca ggacattgtt 300 ggttgctagt atcagaaacc cagctcaacc tggcttagag cagaagaggg cgcccctagc 360
caaaaaatct gcagtcatct gattggccac cctagtatct agagttggag tgaggtcgat 420
ccactagctg gcggaaagcg agatetecca aggaaaactg gagcatagta gccagaaaaa 480
gagggatgga tactgggcag gcagaaacag caggtgcccc catgactaac tgtaggtggg 540 aggtgtagaa aggcagaggc cttcaccacg gcccaacgct gagggaggtg gtgctcagcc 600
acceptegtg ggccttacce ttettecatg aaaatgacet ceatattetg cetecetgta 660
tcaggggagg cctggccaga agagcccaag aaagggtttt ctgccctgac cctgactgac 720
cttgagettg ggcagaccc tetecetetg ttggcccatt tteccatetg taaaatgggc 780
tcgttggagg agatgatccc tgaggtctgc tcaagctcta actgtaacac aggcagcaac 840
tggtgtttat caagcctggt gtgtgctgag cccagggaaa ccaaagacgg catggtggtg 900
cacacctgca atcccagcag tccactgtgc acacagtggc ctgagcactc ctaccatgtc 960
tetgetetaa acetteaata aggteteatt geatteagag taaaatggtt aaagaaaaat 1020
caaacaatag gatctcccca ccccc
<210> 131
<211> 762
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6849312CB1
<400> 131
attecattga gtatatgtac cacatttett tatecattea tetgetgatg gataettagg 60
ttgtttcttt tctcttgttg cttttaagat ctttttgtac ttttttgcca tgcataaatt 120
tttatgtagt aaaatatatt tatattttct tttattatgt ctaaatttta gtcatagttg 180
gagagacttt cattgcactg aggttagaga ggaagacact catgttttct gcaattatgc 240 atatacagtt gatcctcatt tttttgtaga cttggtgttt gtatgtttac ctccttgtca 300
gagtttattt gtaacaccca aattaatgat cttgttggtt tcatggtcat ttgcagacat 360
gtgcagagca gtaaaatatg gagtcaccaa tgtgcatgtt cccatctgaa gctgaataag 420
gtgatateta cettettgtt teagetgtea tattgtaaac aagtgttett tttgtegggg 480
atgccacctc ttccaaaaca catggtctga gagtgtggag gaatagtttt ccaaaagaaa 540
tagggtatat caaatactac atgttctcac ttctaagtga gagctaaaca tcgggtattc 600
atggacataa agatgggagc agtagacact ggggaacatt acagggggaa gttagagggt 660
gggcaagggt tgaaaaacta actactgggt gccatgctca ctatctgcat gatgggatta 720
tttgtattct aaacctcagc atcacgcaat atacccttgt aa
<210> 132
<211> 1550
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7409581CB1
<400> 132
tggtggaaca ggcaggcgtt atgcttctca taagccacac aggcgttgca cttqcacatt 60
gtagaaaatt ctccatggga ccatattctc tctccccata cagctccttt ttctggaagc 120
tacaggtaac agagctgaat tcatgctctt actctcaaat ctcctagcct tccagacatc 180
tccctctttt ttttttggga cagagtctca ctctgtcaac ccaggctggg gtgcagtggt 240
gtgateteaa eteaetgeaa eeteeacete eeacatteaa geaattetta ageeteatee 300
teccaagttg etgggateac aggegtgeac caceteacet ggetaatttt tgtatttttg 360
tagagacagg gtttcgccat gttggtgagg ctgatttcca actcccgacc tcaagtgacc 420
cacctatete ggeeteccaa agtgetggga ttacaggegt gageegcage geeeggeete 480
cagacatccc ctgtcagaga tgtgcctcag ggctctccag ggaccagggg tcaaaggctc 540 tgtccccagc cagacagcct tactcttggg atgactctac cttcccagag cctggtctta 600
gatcaggagc cggggattaa cgggtcctgg aaagccaggg atcaaaatcc ctgccqtcca 660
tctggagaca ctggggggag gcgatgctcc agcagaggca ggacctgctt accttgcact 720
cgcagcccat ctggtacctg tggttcaggc tcttcttctg ggtggtgctc agggtgtccc 780
agggcacgat gaagtcacag agggtgatgt gcatcttgcc gtccccctcg gcctttcctg 840
```

```
cggagagacg gggatcaccg agctcaggga gagggaaaag tcctcctcct gcccagctcc 900
tccacccggc gcaggggcgc tgggatttcg ttgcaacaat cctgtgcact gtctattctg 960
agttaaaaca cagtgggtgg ccaggcacgg tggctcactc ctgtaatccc agcactttgg 1020
gaggetgagg egggtggate tettgaggee aggagtteaa gaccageetg gecaacgtga 1080
tgaaaccccc tctctactaa aatacaaaaa attagccggg tgtggtgtca cacgcctgta 1140 atcccagcta cttgggaggc tgaggcagga gaatcgctct tgcaccccag aggcggaagt 1200
tgcagtgagc cgagatcgcg ccactgaact ccagcctggg tgacacagca agactccgtc 1260
tcaaaaaaat aaaaagtgga aaaaaaaaga aagccataat gcatgttcac tgacagaaac 1320
ttaaacattg gaaacaaaga aaaaacttcc tggccagggg cggtggctca tgcctgtaat 1380 cccagcactt tgggaggccg cggcaggtgg atcacaaggt caggagatcg agaccatcct 1440
gggcaacacg gtgaaaaccc cgtctctact aaaaatacaa aaatttagca ggcgtgcttg 1500
gcgggcacct gttagtccca gtactcagga ggctgaaggt agcgagaatc
<210> 133
<211> 2803
<212> DNA
<213> Homo sapiens
<221> misc_feature
<223> Incyte ID No: 7437113CB1
<400> 133
agecagegeg ceatggegga ceeggaggtg tgetgettea teaccaaaat cetgtgegee 60
cacgggggcc gcatggccct ggacgcgctg ctccaggaga tcgcgctgtc tgagccgcag 120
ctctgtgagg tgctgcaggt ggccgggccc gaccgctttg tggtgttgga gaccggcggc 180
gaggeeggga teaccegate ggtggtggee accaetegag ecegggtetg ecgtegeaag 240
tactgccaga gaccetgcga taacetgcat etetgcaaac tcaacetgct gggccggtgc 300
aactattcgc agtccgagcg gaatttatgc aaatattctc atgaggttct ctcagaagag 360
aacttcaaag teetgaaaaa teacgaacte tetggaetga acaaagagga attagcagtg 420
ctcctcctcc aaagtgatcc ttttttatg cccgagatat gcaaaagtta taagggagag 480
ggtcggcagc agatttgtaa ccagcagcca ccgtgttcaa gactccacat ctgtgaccac. 540
ttcacccgag ggaactgtcg ttttcccaac tgcctccggt cccataacct gatggacaga 600
aaggtgctgg ccatcatgag ggagcacggg ctgaaccccg acgtggtcca gaacatccag 660 gacatctgca acagcaagca catgcagaag aatcccccag ggcccagagc tccttcttca 720
catcgtagaa acatggcata tagggctaga agcaagagta gagatcggtt ctttcagggc 780
agccaagaat ttcttgcgtc tgcttcagcg tctgctgaga ggtcctgcac acctagtcca 840
gatcagatca gccacagggc ttccctggag gacgcgcctg tggacgatct cacccgcaag 900 ttcacgtatc tggggagtca ggatcgcgct cggcctccct caggctcgtc caaggctact 960
gatettggag gaacaagtea ggeegggaca ageeagaggt ttttagagaa eggeagteaa 1020
gaggacctct tgcatggaaa tccaggcagc acttaccttg cttccaattc aacatcagcc 1080
cccaactgga agagcctcac atcctggacg aatgaccaag gcgccaggag aaagactgtg 1140
ttttctccca cyclacctyc cycccyctct tctcttgyct ctctycaaac acctyaaget 1200
gtgaccacca gaaagggcac aggcttgctt tcctcagact acaggatcat caatggcaaa 1260
agtggaactc aggacatcca gcctggccct ctttttaata ataatgctga tggagtggcc 1320
acagatataa cttctaccag atccttaaat tacaaaagca ctagcagcgg tcacagagaa 1380
atateateae etaggattea ggatgetgga cetgetteee gagatgteea ggeeaetgge 1440
agaatcgcag atgatgctga cccaagagta gcacttgtta acgattcttt atctgatgtc 1500
acaagtacca catcttctag ggtggatgat catgactcag aggaaatttg tcttgaccat 1560 ctgtgtaagg gttgtccgct taatggtagc tgcagcaaag tccacttcca tctgccttac 1620
cggtggcaga tgcttattgg taaaacctgg acggactttg agcacatgga gacgatcgaq 1680
aaaggctact gtaaccccgg aatccacctc tgttctgtag gaagttatac aatcaatttt 1740
egggtaatga gttgtgatte ettteecate egaegeetet eeacteette ttetgteace 1800
aagccagcca attetgtett caccaccaaa tggatttggt attggaagaa tgaatctggc 1860
acatggattc agtatggaga agagaaagac aaacggaaaa attcaaacgt cgactcttca 1920
tacctggagt ctctctatca atcctgtccg aggggagttg tgccatttca ggcgggctca 1980
cggaactatg agctgagttt ccaagggatg attcagacaa acatagcttc caaaactcaa 2040
aaggatgtca tcagaagacc aacatttgtg cctcagtggt atgtgcagca gatgaagaga 2100
gggccagagt aagtgttctg aagcagctgt ttgctgacag atgcttgaga tgttcatgcc 2160
ctgggctcat caagtcactc gtgaatctgg agcctgtttt cctgaaaagt tcctgtttgc 2220
attactctgc agtttccatt tgcattatcg atgagtaaga tgcttgttaa gcagcatggt 2280
gtgactgaaa ggatactaga tcggaaaatg aattttcttt ctgaaaggga agtctgagcg 2340
agtotoctaa atactotggg ctttagotto tocagotgtg aagagotgga ttgatgcagt 2400
ttttttttt tagagggggt ctcactttgt tgcccaggct ggtcttgaac tcctgagctc 2520
aagtgateet eetaceteag teteceaaag tgetgggatt acaggeatga gecacegtge 2580
ctggctttgc tgtggattct tttgggtgtc ttttgttttc ctacacgatt tatagaggat 2640
```

```
gaggggcgga gaaagagata gaaaaaaggg atgagctagc tgttagagca agggttttgg 2700
tgagagataa tattgattga agggattita aaggaaatgi tgctgtgggg gattcattgt 2760
aactctcctt gtgaactgct cagtaaactc tacattgttc atg
<210> 134
<211> 627
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500260CB1
<400> 134
ggcggagcct gagggacccg gcggctggtg agcgcccgct ggaggctgga gcttccgggc 60
cctggaaagg ggtccccgcg cgccccgggt cggaggcaga cccctgggtt tgggggacat 120
gggcatttgg ggcgcctgaa cccaagacct ctggatggcc ctgtgccctg gtggcagccc 180
ccagcaccag gacctcgctg ggcagctggt ggtacatgaa ctcttttcca gtgtccttca 240
ggagatetgt gatgaggtga acctgeeget geteaccetg agecageece tgetgttggg 300 categeega aatgagacca gtgetggeeg agecagtgee gagttetatg teeagtgeag 360
cetgacttet gagcaggtga ggaagcacta cetgagtggg ggaccegagg cecacgagte 420
tacaggaatc ttctttgtgg agacacagaa cgtgcggaga ttgcccgaga cggagatgtg 480
ggctgaactc tgcccctcgg ccaaaggcgc catcatcctc tacaaccggg ttcagggaag 540
teccaetgga geggeeetag ggteeceage cetaeteceg eegetetgaa aataataaac 600
gactttattc ttggaaaaaa aaaaaaa
<210> 135
<211> 2337
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7659504CB1
<400> 135
gagaccaaat gaaactggca aggtgtgtac ttcagcaaaa agaatggcat gaatggaatt 60
tacaaaacag tactaatgtt actataaaca ttaattgaaa ccaaacactt taagggcgat 120
tggaggattg gggaataagg tattaggaag agttctcatg gattcccaga cagggtaccc 180 ctatagggct gggcatgtag ctgtgtccca tggatcgttt ccccttcgtt ctatcccagg 240
ctggtacttg tgggacaaga ggtgtccacc cagccgggcc gaggctcggg cagagacggg 300
acagactege cactegettg geacagtett gtaggacttt ceegecatge cacataggte 360
agaggeeeae geagegaget ectaetgaaa accategeae cateeeeeg gggeatttet 420
gcagtgttcc aggctctgga ctacatttcc cagggccgtc gggaccaagg ttacttccag 480
cctaagatgg cctgggctta ctgtcctgtt cccagggctg ggagcctttt gcagaggtag 540
ggcagcctgc atgcctccgc tgaagcttcc taaacgcggc ctggaattct ggaagctctc 600
ggcagcagat gtgagcggtg tgtgggcgat ggtctttgcc cagcgagggg atggggctca 660
aatgcagggt ccgttaatgg tgaccgcggt gtccggggca gttaaagacg gcccaggctc 720
eggactacat tteccagagt geacegttee eegggcaact teetgteage cetetgteee 780
tttagggtta atagaaagat cgcggaacct tccaccatca agggaccgca gggccggctc 840
tgettteeca geacgetgee teaccaagaa agaateeaga gaaggaetgg tggaettaat 900
gttcatgttg gtaggaaacc ttataaatgt gagaaatgtg ggaaagccta tatttggagc 960
teacacettg etegacatea gegaatteat aetggeagga aacettatga atgtaageaa 1020
tgcgggaaga cttttacttg ggcttcgtat cttgctcaac atgagaaaat tcacaatgag 1080
aggaaatcct atgaatgtaa ggaatgtgga aagacctttc ttcatggctc agagtttaat 1140
cgacatcaga aaattcatac tggtgagaga aactatgaat gtaaggaatg tggaaagacc 1200
ttttttcgtg gttcagaact taatcgacac cagaaaattc atactggaaa gaggccatat 1260
gaatgtgaag aatgtggaaa agcetttete tggggtteae aacttaeteg acateagaga 1320
atgcatactg gtgaggaacc ttacgtatgt aaagaatgtg ggaaatcttt tatctggggt 1380
tcacagctta cacgacataa gaaaattcat actgatgcag aaccttatgg atgcaagaaa 1440
agtagccaca tetttagtca ecatteatat tttactgaac aaaaaattea taatagtgca 1500
aatctctgtg aatggacaga ctatgggaac acctttagtc atgagtcaaa ctttgctcaa 1560
caccagaata tttacactit tgagaaatcc tatgaattta aagattttga gaaagcattt 1620
tettcaaget etcaetteat tteaetettg tgaaatatta tataaaagig taggaaggge 1680
tttattcatg actcattaat tgatgtcatt tatttttttc tcttgaggaa caccacaaat 1740
gtaagtaata ttggaaggca ttttaacaga gcacacatcc agcagcagca gcagcagcag 1800
cagagaattc atcatgcaat caatatagga aagaaattac tgatcagtta tcaattgcag 1860
```

```
aatatcaggg taaaatttta tgagatagca tgaattcttt ttgaatcatt ctcaaaacat 1920
tctcatcaga gatgttgcat aaagaattta tatataattt ggccaagcat ggtggctcac 1980
acctgttatc ctagcacttt gggaaacaga ggtgggtgga tcacctgagg tcaggggttc 2040
gagaccagcc tgaccaacat ggtgaaaccc tgtctctact aaatatacaa aaattagccg 2100 ggcgtggtag cacacgcctg tagtcccagc tactcgggag gccgaggcat gagaattcct 2160 tgaacctggg aggtggaggt tgcagtgagc caagatcaca tcactgcact ccagcctggg 2220
tgatagaaca agactccatc tcaaaaacaa aacccacaag aaattatata taattcattt 2280
tggaaatctt tcatcattag caattctgtt gtattaccct tcgcaaccgt ggctacc
<210> 136
<211> 957
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 821165CB1
<400> 136
gtgttaaacc cctagaaatg gcaacttcct gatggggatg gaactcattt ggcagggggc 60
atgaggecae caatetggag ceteetgage teettgecae tgeetgggge ceeteetee 120
acgeceteat coeteceace etcaccactg ggtecaccge cageetggge tecegtttge 180
ctcagccccg cctctcagca gaactgcggc agcatgtcca gggacaaggt tcttagaggg 240
actggatttg gaccattcct cccagccaga tattttgcag cagggagagg aggctgcatc 300
agattcctat gcccacaaag caccacctcc ttttccagtt aaggcaatgt ggggctgcaa 360 attttcatgc attcaggatc cttctgtaac ttaattcctt tgccgtcagt cccctcccgc 420
ttetgeagaa tgeatgetee tageaactet cacagacetg acceetgaca gteattgeee 480
acceggaact ccaaagecag cagggettge tgetgeetag aaagacetat tgecateatt 540
cccttgtccc tgctctataa acgtcctttt gggaaaagca ctcccatctc cctcctttcc 600
cacacagaca gegeactatg egtgetatta gtetgtgeet tttgtaaaaa taggaagtgt 660
cagcegggeg eggtgeetea tgeetgeaat ectageaett tgggaggeeg aggeaggegg 720
atcccgaggt caggagatcg agaccatcct ggctaacacg gtgaaacccc gtctctacta 780
aaaatacaaa aaattagccg ggcttggtgg cgggcgcctg tagtctcagc tactcgggag 840 gctgaggcag gagaatgtcg tgaacccggg aggcggagct tgcagtgagc cgagattgcg 900
ccactgcact ccagcctggg cgacagagcg agactccgtc tcaaaaaaaa aaaaaaa
<210> 137
<211> 1731
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7499672CB1
gctgtctgag ggtggagggg tgagtagggg gcctgcagtg tgctgtgacg cctgggaagg 60
ggattctaag ccatttccca tcagccattt actaagtagc ctggggatct tgttaaaatg 120
cagatectga tagattaggg ctggggtget geccaagatt etacatttet aagagteeet 180
ggatgacggt ggcattcaca gaccacagct tctatgtgag ggagagcagt tgggtttctg 240
tetgeetgee geacetgate agtagttagt geetgeatgt gtggeggeea gaattttact 300
tggggagacg ctcggctcct agcaccctct gtggtagggg ttttccagag tgtgggcatt 360 accccaactg tctctgcaga cggcttcctg catgtttccc acaagcgctc agatggctga 420
attggcaagt ctgtggtgct gctctttggg gccacctcgt tctttgcctt tccctccct 480
tagcgatgtg tcccatccgt tgcctacagt caagtcagtc cacatgttta ggctaaggtg 540
ggcatgaccg agtggccttc ccccgggaag accagtgtcg taactggaat taagttgtgg 600
aacgtaagag tcaaggctcg tgtctgctgt gaactggagt tgagggaatg tttggggatc 660
ccacctggta tcagtaaggg aaccatggcg acggccagcc ttgcccatgt gaggcatttg 720
ctttgtcagg ccttctcagt agtggagaag ggaggaagga gaatgcagct ctttcagtgc 780
tgtctagcag tgcccaagag ccgtgattgg gcacctcact taacgtctaa cttcagattc 840 actcttgggc attcctgtct tcctctccaa tcttgaatgg atgttggctt cgataatgtc 900
atcetgaagt ttetttgtee acacageeet ggetggttgt taataagetg ttaatgeage 960
cttgcactca ggaagecetg atgtttaaag gaactgtgtc tttgttcttc ctctctccc 1020
tetttetett agteecaett tatetettet ttetetteet eteceteete etttteecet 1080
ctecetecta etetececet ttetetecte ettetetaag aaacccagte ttattecaca 1140
caatgcatgc acatgcagta gcttctctgc ttgagtgagc tggtgtgatt aggttttcta 1200
aacatgcaca ttggccttgc tacttgtcct tttattccct tcccacagac cataaaccaa 1260
```

```
gaattatttt tatttgtatt attttgattt ttttaaagta aaatattaac ttttcctctt 1320
tgaaataaat tcccatttgg aacatcagca tacagtttga acatttattc gcctcctgag 1380
cttgtacaac agtcgtggga gttgctgcag aagcaagcga aaagccagat gagcgcttct 1440
aaacttagag agaggtgagt aaggettgtg ggcgatcact tgtcggctgg ggcctctttg 1500 gcctcttccc agaggatgtc ctgaagaaac ttccccaggg cctggctgtg ctgctggtac 1560 agaacccctg acagcttgat tccaacatca aagggggcgt tgaaccggac ttccagttca 1620
tectetgeec ettetgettg acetecatet teegggegga gecageetge tagagetegg 1680
ggctgcagct tggctggtgg cttcttcgac tcctttctct gctggactct c
<210> 138
<211> 695
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500276CB1
ggaacttegt tateegegat gegttteetg geagetacat teetgeteet ggegeteage 60
accyctyccc aggccgaacc ggtgcagttc aaggactgcg atattcagtc taaaagcagc 120
aaggeegtgg tgeatggeat cetgatggge gteecagtte cettteecat teetgageet 180
gatggttgta agagtggaat taactgccct atccaaaaag acaagaccta tagctacctg 240
aataaactac cagtgaaaag cgaatatccc tctataaaac tggtggtgga gtggcaactt 300
caggatgaca aaaaccaaag totottotgo tgggaaatco cagtacagat cgtttotoat 360 ototaagtgo otoattgagt toggtgoatc tggccaatga gtotgotgag actottgaca 420
gcacctccag ctctgctgct tgcaacaaca gtgacttgct ctccaatggt atccagtgat 480
tegttgaaga ggaggtgete tgtageagaa actgagetee gggtggetgg tteteagtgg 540
ttgtcttcat gttcttttt tcgtgcttag ggtgttttca ttaaatgcag cacttgggta 600 agccgttttt aattttttt ttaacaacat taactgtggg ccgcttttgc aacgggggat 660
tactcttgat taataaaact cctttttctg ttagg
                                                                           695
<210> 139
<211> 1468
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1440723CB1
gggaccetca gagacetcae teagacetgg gaggeeeatt geteacatgg eetggetget 60
cccggtgggc agaagatgga gaagccacag acagcgtcct gcgtggggtc tgtgggcgct 120
gacccagcag ccgtgcaggg aacagccctg cccgcagaag cggatgccgg ggcaggtggc 180
agtgcacccc gaggaagcct tctggacgga gtggtgggga gggcgcgggc gcatgtctca 240
ggccagtgca cttcacatct catcccacac ctgcgggttt gagcttggtt tggggtgcca 300
geteceacet ggeeageeae ecettgggga eteaceetgg geteteetge caatcaaggt 360
ggagaetttg ggacageeet cetecaegtg aacagaetga eegagaeatt tetecaecae 420
cteceteaca etgtgeeege ecageegeee ceteceetgg ecettggeag gaggeteett 480
ggcagctgac gggaggctcg ggcactgcca gatggcccct tcgcaagtct tcggtttgtg 540
tctaaccact ttttccttgg aaaagtgtgg ggtgaagagc gatatgggac tccataggca 600 gccgccaggt ggtggtggcc tcgctcctcc tgctgccggg ggctgccacg gccacctcca 660
gggatggctg tctggcccgt ctgtggaagc ccatcaggaa gcacccccag tgccqqqcct 720
cagccaagag caccggcctg gaaggggcag ggctggggga cagtggcatg aggtcagaca 780
tggcgtgggg ccgacccgc aggcagccca ccatccacag cctccatgtt ctgtctgcaa 840
aatggggcca cagtggggcc tgggcagagg agagaactgc ccactgcccc aagcacggtc 900
cccagagage tggaggccag ccagteetee acacccagee ceteeccage agaccettet 960
tccagtgggg cgctgtgccc gactgggtcc tctctgaacc tctgcctttt cgtcactgaa 1020
gttcgtaggt tcttgttctt gggaactgtg agttcaggca ctaccagcac gacagccaga 1080
gggacggacg gacggctgga caggctggag gcccctgcca tgggcactca ccccgtggga 1140
cagacagaag gatggatgga cggttggaca ggctggaggc ccctgccttg gggcactcac 1200
cccgcaggat ggacagaagg gcggatggat ggctggacag gctggaggcc cctgctatgg 1260
ggcactcacc ccacggggac agacaaagga tggatggaca gctggacagg ctggaggccc 1320
ctgccatggg cactcacccc gggggacaga cagaaggacg gatggacggc tggacaggct 1380
ggaggcccct tecatggggc actcaccccg tgcgacagac agaaggacgg atggacggct 1440
ggacgggccg gaggcccctg ccgtggac
                                                                          1468
```

```
<210> 140
<211> 708
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7479612CB1
<400> 140
gaaaaaacac agcttctgta atcttttctc tttctctttc ctggaaatta gaacaaattt 60
tttgaaggaa gaaatattgt caacattata accttgagtg aagcattatt actttagtaa 120
atatctcgct aagatactga acatcaaaat taaaaatcaa acaacttcta aatgtattta 180
tttgcatttt tatgctgtgt acttttgaat atagtgattt tattattttt agtaaaattt 240
catgaactgc tgtgtacttt ggtttcacac actcaacacc ataccaataa tgaaattatt 300
agtaatttca agttactaat tgattggctg tcatgtgcta taaatgataa tgccatctgt 360
gaaccagcaa ggcatagaca gaattgtttg gaaaaaagcc tgattagtac cagttgcatt 420 aattctaact ccccataatt tagacctttt tttttcttac aaaaagttga aagaatatta 480
ttgtagaaaa cttagcacct ttaataaagc atacttttct cacacttctt cctttgtctt 540
tcagaagtaa attatctaca ggttccttta gtgaaagtct ctcaggcctt atttgtctga 600
aaatggtatt attttgcatt attttcttaa agcagtattg gtgggtaaaa atttgagatt 660 gatggttatt ttcttgcaac attttgaagt tttcctgtag ttgttaag 708
<210> 141
<211> 1781
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1391514CB1
<400> 141
agagaatggt acctttggtg gctgttaaat caccaccgct accctcagtc cacatcagtc 120
ctttgaattc caaaggcagg tactctctag ctcagaggtc ctcgaacttc agcctgtgtg 180 ggagtcaccc atcctggcac ctgattagaa acacagacac ccaagtccca ttccaaatat 240
tctgactcaa ttgacctgag atgcaccaag gaagtgtatt tttttatttt tatttttga 300
gccttgctct gtcgcccagg ctagagtgca agggcgcaat ctcagctcac tgcaacctct 360
acctcatcgg tttaagtatt tctctccaca tagcgagatc tccttgtctt ttccctgacc 420
tacttgcctg ggactttgtc ccaggcggca tccccctggt ctgtccacct tcaggccttg 480
tgtctcaccg cctgtgctga ataagattga aatagagcct aaaaatagtt taatggcccc 540
tgcattgcag cctgcacttc tctgttcttg gctggaaggc agccaaactg actcagcaca 600 aaagctcatc tccagaagcc gggacaagat ttcaaagagg gcttgtgagg gctgggaaga 660 ggctttgctt cttagacagg ggatatcaga gcctgtcacc ctccagaaga gattttccct 720
ttccagagaa gcagactgaa caaaagaatc ccttggcttt aaggaggatt ttaaaacaag 780
cgagaagccc aggtcaatcc ctcccctgtg agctacttag ccattcatgc caagggtggg 840
cagattaggg ggaaagggac tggcttggga ggacctagaa gcttcctcct cagctggaat 900 tgtccacgga cttttggcag attatactct ggggcatatc gcagaccgca gcccatctgt 960
egetetettg tacetgggae teageetgtg theettgett tittitte ecetitacaa 1020
tttttttaaa acatttttt ttctttgggg aggccaaggt gggtggatca cctgaggtca 1080
ggagttcgag atcacctggc caacatggag aaaccccatt tctactaaaa atacaaaatt 1140
agegggtgtt gtggcgtgtg cetggetact caggagactg agatgggaga ategettgaa 1200
eccgggagge ggagetggtg gtgagetgag ategeaceae tgeaetecag cegtgggeaa 1260
aacataggga gcccgcgcga ccccggggaa ataattccgg gaccgcggac ccgggggggg 1380
tttttcccag ccgtgtgggc gcctcacagg tgcccagagt tccataatgg ggggccccaa 1440
acacggatgg gtcgcttgga caccataggg gtctatgtac taaactgggt gacccggctc 1500
acgaacaggg ggggcagggg cgaatatttg gtctccggcg gtacaccctc gtatattagt 1560
gtaactattc gcgtaaattg acttccagta tattgttctc ggtctcatga ccagctgcta 1620
ccccgttaca aacgtggctc agactaactt tttgtaacta ggcgcagaga ctttgcgaga 1680
tctagaccat tatccgtagg ttcgccatta aaccgttgtt agcggagaaa attcgaccca 1740
cggttactgc ggcaccccaa catcgcgtgc aagactacag g
<210> 142
```

<211> 1032

```
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2102578CB1
<400> 142
ctcgagccct tgctgatgct cccagctgaa taaagccctt ccttctacaa tttggtgtct 60
gaggggtttt gtctgcggct cgtcctgcta catttcttgg ttccctgacc aggaaacgag 120
gtaactgatg gacagccgag gcagcccctt aggcggctta ggcctcccct gtggagcatc 180
cctgaggcgg actccggcca gcccgagtga tgcgatccaa agagcactcc cgggtaggaa 240
attgccccgg tggaatgcct caccagagca gcgtgtagca gttccctgtg gaggattaac 300
acagtggctg aacaccggga aggaactggc acttggagtc cggacatctg aaacttgaga 360
acatcaccac cctgaagcca gagactaaca ctgcaggact cagcaggact atttaagaaa 420
caactgaggc atcagaccaa ctttccccac aagtcctcgg atctttcctg ccatgctgat 480
gccatatatt ccaacgtgat caacctggct ccccagaagg aggacgactt tgctgtctac 540
accaacatge eccettttea teaccecagg aggacattge cagaccaagt ggaatatgte 600
tecattgtat tecaetgatg ggaagetaat gagatgetea gagtgggggt cagacetgge 660
aatacatagg ccaggcacgg tggctcacac ctgtatccca gcactttggg aggctgaggc 780
aggcagatca ccaggtcaag agatcaagac catcctggcc aacatggtga aaccccgtct 840
ctactaaaga tacaaaaatt agccaggtgt ggtggtgcat gcctgtaatc ccggctactt 900
ggaaggetga ggcaggagaa tcacttgaac ccagggggcg gaagttgcag tgagccaaga 960
tcacaccgct gcactccagc ctggcaacag agtgagactc catctctaaa aaaagtaaat 1020
aaataaaaat ga
<210> 143
<211> 2870
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 3213122CB1
agcatatttt gaattgcagg tagcatgtga ccctcacggc gtgtgggaga cctgaaagag 60
gaaacttact ttgcctaacg tcagatgtcc ccgcaacagg atgtgttatg cagccctgcc 120
tggccctttg tgcacctgct tgctccttgc aacagccccg ggagcggcaa aggcagtact 180
tactaggaaa gtcatggaaa gctggatggg cctactggct ggtgcctggg ggacgactca 240
gaccetggga caggagggtt cccaccetge ccagceaget cetggeecca ggagteegte 300
ctctctcctc caaatctggc ccccgtccct tccctctctg gtcctccctg tttcacctgc 360
agggtgetea gtgcccggaa ettggcgtat etgaggtggc cagaggcgcc agcggagcag 420
gatgtcggag ctgccactcg ccttccactg tgctgtgaga gccaccggga cacqtcaqca 480
teteccetgt tetgaaatca acacegagae acacegagte ceteeggagg catetgeaga 540
ggcagcaacg ccacgcgagg gctgccgact ctccagctcc aacatttcgt ccggacctcc 600
eggeagegea gegggggate eceteeegtg aggggeeegg aggggetteg agaaggetgt 660
cgcctgatgg gctccgtcaa gtttccccct gcagaccctc attctaccag ttttgattcc 720 attttaaatc tgacttccaa gtggcacccc tgccgacggt caaaacgccc cctctcctgg 780
tgtgtgccct ccatccccgc ttcctggggg cagccggttt cttgctgtct ggacaacaga 840
getetgecaa tgecaettat etegecegte caggaettta teaccaactg tectaettee 900
gactccagca aaggagcgac agcgagcacg tetgtgettg getgtgacta acagggeete 960
tgaataaagt gaaaataatc ccactttaag ctgcaagagg aaagacccac agaaggaaag 1020
teetteaegg aeggagaeee aggateetga aatgeagtge gteeetteaa egttetgaga 1080
ataaaaattt aaacatgcaa gccccgggag gaaaagcaat tcctaaaaaca tggcagaaac 1140
aacataaaaa aaatettget gttgtttaa aaactgacet aagaccagge atggtggete 1200
acacctgtaa tcccagcact ttgggaagcc aaggcgggag gatcacttga ggccaaaagt 1260
tcaagaccag cctgggcaat gtagtgagac cacccccat ctctacaaac aaatgtaaaa 1320
attagccaga catggtggtg tgcacctgtg gtcccagcta cttgggaggc tgaggtggga 1380 ggatggcttg agcccaggag gttgaggctg cagtgagctg agattgtacc actgcattcc 1440
agcctgggtg acagagcaag accctgtctc aggaaaaaaa ataaaaaaaat aaaaaataaa 1500
tagectgate teetgtttte caggaaagee egageettgt aagggttttt cagatggtag 1560
tgaaacaact tggaagtcag caattcctaa ggattttcca aatcttctca gactaaaatt 1620
eteccaettt cetgetgeet tgttcaaacc atggttegga gatetgtgag cageetgeea 1680
gccgccggag gctctgaagc ctttctgagg cgaggtcttt gcacctgaac gctctggtag 1740
aacaaggttt agcaaaaggg agcctggaag ggcccatcct caccttctgc ccagtcctgc 1800
```

```
agggeteagg acacateetg ggggetaate tgtgggaaga ggtttgaetg agaceeegtt 1860
ctgctctgtg aatgggcgga ctcttcagca tctcacacgg agaaacaact tcctcctgga 1920
teggageeca agteagggat aaggtgeete etgeetgeae egtgggeaet ggeegeettg 1980
ttacagaatc aacggccgtc cactgaggga caccgggtgc caggggtcct aacaccctc 2040
cagagcaccc ggcacagctc tccttggagc tgggtgctac ccttagtctc gttttgaaga 2100
caggactggg cggtcaggtc agcccatcct cacactgcgg tgagtagcgg gggcaggagc 2160
agcettgetg tgggecaege cetgggeaat gageggtgge teettggggg ateteagatt 2220
tttccaagtc tgttttctat atggctgaac gatgtgacaa aacacttgtc aaggacaccc 2280
tctcaggtgc tctgatctgc atctttcacg agcgagaggg ggggtgccag gcacttcctg 2340
gtggaccttc agttaccgcc catcagaaca caagcaggca gcgcgaaaca tgctgggccc 2400
gggggctcca tegecettta cactgccaca etcagettee acatgtteta etgtgggegt 2460
gtgcccctcc ttcatgtttc tggggttcat ggggacatta gtgttgtcct tccctttctg 2520
tctcaaagaa ttgactgtgc ctgtcattgg acgcagcggc tgccatgaat gtcgaccggg 2580
aaagcgatgg gaaaagctgt tcagacacag ctgagctgcc tctacctggt cacctgcacg 2640
ccaggcccat gcagtctgct ccatccctgt ccctggcaga gcccatctgg gagtggtggt 2700
gactgtgcca gctggagacc cactgagcac cagggtgcag cacagacaac gacgcctca 2760
ggctgcgtgc agtgaagagc cgggagaggc agcgctagaa ttgtttttag gaactggatt 2820
tgggcttaaa gaataaacaa tgtggttcag ccacgctaac ccaaaaaaca
<210> 144
<211> 2337
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 4326307CB1
<400> 144
tagaggcgga agaaaaggct gaggtggatt cacaggctct atagatagag aacagtgtag 60
tgctgaaaag gttagagagg tcttttgttc tgacaataat gaggtagttt gggatcttgg 120
atttctgaat atgacttgga tgacacataa ggagatgggt tcccccattt cacttaccca 180
agtgtaggta gccccaacac agttaggtcc ttagccttgt gaattgttga acaagtgttg 240 taaacccaga atttctgctt ctacagaaat gtccttcttt gcctaccagt attagcattt 300
ggatatgtaa ttcttgctcg actttttttg ttacttaacc agaatgacag tctttcccct 360
atetteette tttattetta tettetaeet tteeeteeca aaetetttee eegacataac 420
agaaaacatg aaggaattaa aggaggccag gccgcgcaaa gataacaggc gtccagatct 480 ggaaatctat aagcctggcc tttctcggct aaggaacaag cccaaaatca aggaaccccc 540
tgggagtgag gaattcaaag atgaaattgt taatgaccga gattgctctg ctgttgaaaa 600
tggtacacag cccgttaaag atgtctgcaa ggaactgaac aaccaagagc agaatggtcc 660
tatagaccca gaaaataatc ggggacaaga atcettteet aggactgetg gacaagagga 720
tegtagteta aaaattatea aaagaacaaa gaaaceegae etgcagatet ateageetgg 780
acgacgtttg cagactgtta gcaaagaatc cgccagtcgg gtggaggagg aagaagtcct 840
caaccaggta gaacaactga gagtagagga agatgagtgt aggggaaatg ttgcgaagga 900
ggaagttgcg aataaaccag acagggccga gatagaaaag agcccaggtg gtgggagagt 960 aggggctgca aaaggagaaa aaggaaaagag gatgggaaaa ggggaggggg tgagggaaac 1020
ccacgacgac ccggcccgcg ggaggccggg ctccgcaaag cgctactccc gctcagacaa 1080
gggagctggc ctgacggata atggatgtcg ccgccgccga caggatagga ccaaggagag 1200 gccaccactg aagaagcaag tgtctgtgtc ctcaaccgat tccttagacg aggacagaat 1260
tgatgagcct gatggattag gacccaggag aagttcagaa aggaagagac atttagaaag 1320
aaactggtct ggccgtgggg agggtgagca gaaaaccagt gctaaagaat atcgaggcac 1380
tettegtgte actttegatg cagaagecat gaacaaagag tetcecatgg tgaggtcage 1440
caqqqatgat atggatagag gaaagcctga caaaggcttg agcagtgggg gcaaaggctc 1500
tgagaagcag gagtccaaaa acccgaaaca agaacttcgg ggtcgtggtc gtggcattct 1560
gattttgcct gcccatacca ccctatctgt caattcagca ggttctccag agtccgcgcc 1620
tttgggacct cggcttttgt ttggatctgg tagtaaggga tctcggagtt ggggccgtgg 1680
aggeaceaca egeogattgt gggacecaaa caateetgat cagaaacetg etetaaagae 1740
tragarger cagetaratt tettggarar tgatgatgaa gtragereta catettgggg 1800
tgactcacgc caggetcagg catettacta taagtttcaa aactetgaca accectatta 1860
ttaccccgg acaccaggcc ctgcctccca gtatccctgg catgtgtggg agcagtttt 1920
attagagaga atgctcaatt tgcaagttaa tttcaagtct ccagccacgt caggaaaaaa 1980
acatgaagga attaaaggag gccaggccgc gcaaagataa caggcgtcca gatctggaaa 2040 tctataagcc tggcctttct cggctaagga acaagcccaa aatcaaggaa ccccctggga 2100
gtgaggaatt caaagatgaa attgttaatg accgagattg ctctgctgtt gaaaatggta 2160
cacagcccgt taaagatgtc tgcaagggaa ctgaacaacc aagagcagaa tggtcctata 2220
gacccagaaa ataatcgggg acaagaatcc tttcctagga ctgctggaca agaggatcgt 2280
```

```
agtetaaaaa ttateaaaag aacaaagaaa ceegacetge agatetatea geetgga
                                                                    2337
<210> 145
<211> 728
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6037749CB1
ctagcacttt ccaaacagac tgagaccatg gcagtcttcc atgacatgct gctgcagcca 60
ctggggatgt ttctgtgcct cagtctgcag ctttcttctg ccacctttat aaggtacagt 120
agcactgct tcacctttga tgaatactac accataaccc tagacatcaa ggccagttca 180
catatctacg aaagcaatgc agtctattct gtatttgttc ccgtgaatga cagcgtctat 240
getgtggtca tgaaaacett ggacgagaac agtgactcag egggeetetg gcaaagageg 300
gataaaaatt getacagcaa etecacgtat tacgtgaaag atcaatacat gacggtetta 360
gaggcacagt ggcaagctcc tgaacctgag aacataactg aagtggagat acaagctttc 420
actgtccaga tcagagcgct gcctatactt cctactctga agctaagaga aaaacgttac 480
aaggaacttc tgtgactcat gtgactcaag aaagaaagga gaaaggagaa atagctctga 540
ggctgctggc agcttcccat ttgtccacac cagtagattt tgaagggcaa gagaacagga 600 acgaccatgt ctgagaagcc actatagaaa aaactatgtt ttaccacctt tggtccaaca 660
ggcctaga
                                                                    728
<210> 146
<211> 1952
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 6285519CB1
<400> 146
ccccttcctg taattgtctt ttctttcatg caccgctact tacctgtgtc ccctcttgcc 60
geocectttg tittettete tittettegt gigageaaca aggetgitta titeactigg 120
gtgcaggctg gctgagtcag aaagagagtc agcaaagggt ggtgggatta tcattagttc 180
ttataggttt ggggataggc ggtggagtta ggagcaatat tttgtgggca ggggtggatc 240
tcacaaagta cattctcaag ggtggggaga attaccaaga acctgcttaa gggtggggga 300
gattacaaag aaccttetta atggtggggg agatgacaaa gtacattgat cagttaggat 360
ggggcagaaa caaatcacaa tggtggaatg tcatcagtta aggctgtttt cacttctttt 420
gtggatcttc agttgcttca ggccatctgg atgtatacgt gcaggttaca ggggatatga 480
tggcttagct tgggctcaga cagtccctgc tcctcaaaca ccttcccggg gcttggaagt 540
gaagtggcag ggagcagagc teteetgtgt gacetgecag ggaetteact gaggtgttge 600
acatatgtgt cacttgcagc ttcctgagaa gtagctctta gtgtcagcag caggctgtgt 660
tttccagtag tttgggttag atcccccta gctggagata ttcagagggt ccccaaggga 720
ccagaaaatc atgtttatgg aatgacatga ggtcagaaaa gaaatcaaat tcttatgaag 780
ggtgggattt tgttggcctg agacaagaca tgtgacagaa tgctccagga ggtgagtggc 840
atgcatgttt ttggcacgca tgtttttaat aaaggaagac aagaatagac tcctgcccca 900
agatggctgc atgctcaggc agtggtccct gcccaagatt gccaaatgaa acttaccaga 960
ggatgcaggg cgctgctgga gtagaatccg gaacaccaga aagactgagg tagaaaagtt 1020 aaaagcttag ctaagaatct gcaagcaggg ggcaaggata aggaacatgg gtctgaaaag 1080
attcagaagc aagttaagtt getcageeeg gettaagetg aatgacagag aagcaggagg 1140
agagaaccta gagaaggtgc ggccctgagt cctgggagag gaagcctcca cagtgggaag 1200
aaaccacctc cttcctgaga actaaaaccc ccatctgacc cacgtcttgc gctgatgcag 1260
agettaatgg ttgacaaaag cetecatgag catgegatca tttggtttgg tettcaagec 1320
acceptigat gtggaaggca atggttacce cattttatag gtgacagcaa gagaagcact 1380
cccatagcaa gatgagcctc tgtgagaaat caaatgcagg tgactaagcc agggaggtct 1440
cccatctaag cactctctgg aaccttggcc acgatcatct cagcctcctt tatatgatat 1500
tgtgacagtg gtttgtccaa gccgcccaaa ttgtccattc ttatctgcaa aaccttcaaa 1560
aatcaaccca cactgcccct taaccctaaa gcagaaacat catcactgaa tgtacgtatg 1620
tgtgtgttgt atgtatgtac aatatgtatg tattgctact attcagggga gaatttggga 1680
acagtgtgaa caaatctggc aagaggctca tgtcagcctg aaaaccctca ggggtcacaa 1740
agectageag aggatgeact ttgacattea tgteaacaga tttatacaga ctgattggag 1800
accagetacg aggeagacte tggagagaca caaaaatcag taagacacac atcataggtg 1860
```

```
taggaagett eetaeeeaga agggaggtga acacaaaaag ggecaagagt eeteacagta 1920
gccagtcgac ccgggaatta ccggaccgga cc
<210> 147
<211> 2490
<212> DNA
<213> Homo sapiens
<220> .
<221> misc_feature
<223> Incyte ID No: 70336045CB1
<400> 147
agaggaagag cgcggccggc ggcgctgcgc tgagagcagg gcccggccaa ggcgagtgcc 60
gcgcgggcca ccatggccac ggacgagctg gccaccaagc tgagccggcg gctgcagatg 120
gagggcgagg gcggcggcga gaccccggag cagcccgggc tgaacggggc agcggcggcg 180
geggegggg caccegacga ggeggeegag gegetgggea gegeggaetg cgagetgage 240
gccaagetge tgeggegege agaceteaac cagggeateg gegageecea gtegeecage 300
egeegegtet teaaceeeta cacegagtte aaggagttet ecaggaagca gateaaggac 360
atggagaaga tgttcaagca gtatgatgcc gggcgggacg gcttcatcga cctgatggag 420
ctaaaactca tgatggagaa acttggggcc cctcagaccc acctgggcct gaaaaacatg 480
atcaaggagg tggatgagga ctttgacagc aagctgagct tccgggagtt cctcctgatc 540
ttccgcaagg cggcggccgg ggagcttcag gaggacagcg ggctgtgcgt gctggcccgc 600
ctctctgaga tcgacgtctc cagtgagggt gtcaaggggg ccaagagctt ctttgaggcc 660
aaggtccagg ccatcaacgt gtccagccgc ttcgaggagg agatcaaggc agagcaggag 720
gaaaggaaga agcaggcgga ggagatgaag cagcggaaag cggccttcaa ggagctgcag 780
tecacettta agtagegggg getgeageeg accecetge teeggeecea gtgtggtggg 840
cgagggtggc gcatgggagg ccgagcctga atccttgcct gtgtctgacg ggaccactac 900 taaaaaccta aaaatatctg tgaatggagc aagttcaggg gtcttatgga ggtggcccgg 960
ecceteceg ctecetteca ctetgeacga ggccgccaca ccggcgctgg ctecetgecc 1020
ggcccggccc tccctggcaa tccctgggct ctcttgcacc cctaactgcc ccctgcctgc 1080
teeggeactg ecceaggeee ageteetgge ectaggteee teecageece atgtgeetge 1140
cgcctgccct ccacacatcc ctgtcccccc aacccgggaa cccctgccct cctccagcag 1200
geegeacege ecetggggee ecetgeeage ecetteecag getgggagae ageagaagag 1260
atagaateag ggctgcccc acagagtggg acccaagggg ctaattggag gcacgagggg 1320
accectecce agggeethth ceteetetge gtettecate tactgaaatg ggagaggggg 1380 tggggageth etgttetggt gaagggacce gggeaggeee ceageacce atgetgaeth 1440
ggagaacccc agatetetgg ggcccagcca ggcagggtgt gggggcaget gtgccaatet 1500
acctcacagg cccacccct gccgggcatg ccgtgggatc atgggcaggg aaggctctgg 1560
gggtcggaga caccgctgct tagcaccccc agccagaaca ccctgagggt ctcggggctc 1620
tggagagagt ggggcgggag gaagaattgg caccttccta gggaaggaga cgagcgcttc 1680
gccttgattc tccgagaagc ctccgagaag tgctttaagt gtgtttgcat gcgccaggcg 1740
gtgggcageg ggggcetgte cagecetete eegecateet teeccaagtg aegtecaetg 1800
cettgtcacc agegacetge etgtcatgee cacecetga ggaageatgg ggacectaac 1860
accetggtge cetgeaceag acaggeegtg gteaggeeca ggeeacegge egggttetge 1920
cacagettee caegtgettg etgacatgeg tgtgeetgtg tgtggtgtet gttgetgtgt 1980
cgtgaaactg tgaccatcac tcagtccaaa caagtgagtg gccctcgagg ccacagttat 2040
gcaactttca gtgtgtgtca taacgacgtc actgcttttt aaactcgata actctttatt 2100
ttagtaaaat gcccaggagt cctggaagct acgcggactt gcagaggttt tattttttgg 2160
cettagaate tgcagaaatt aggaggcace gagcccageg cagcagccte ggacceggat 2220
tgcgtttgcc ttagcggata tgtttataca gatgaatata aaatgttttt ttctttgggc 2280
tttttgette ttttttcccc cccttctcac cttcccttct ccccgacccc acccccaaa 2340
aaagctactt cttcattccg tggtacgatt attttttta actaaaggaa gataaaattc 2400
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa
<210> 148
<211> 1051
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7153577CB1
<400> 148
gegeetetgt caccagggaa tgggggaaag taagtageea cagggeteac ccagetacca 60
```

```
cacagttggc aaggccattt tcactcccac tgtgccccgc taacagcaca gtttatctcc 120
agcagetggt gtgcaggact cagacetage eccagggtat aagttteece actaagaaag 180
caagcatggc tttcaggcct tgcccctccc tgtctgccca cactgtcagc tgtggctcct 240
atgeteettt etgeageagt teaettteae eeegattte tgetegaeag agtittgegee 300
cagtcaaaat tattacacag ttcagttgga agcttatttc accctgcgac cctgcccaaa 360
ttctgccaac tgtcttcctc aatggcctcg gtgagataca gtcagggatg gcttccctgg 420
cccaagctgg agaatgggag cgcctacaag gctcttcctg ctactatttc tacttttata 480
ttttatacta aatccatttc agctctaggc aaggttaaat cettetteca taatctgggt 540
tttgaggttc cccagtggag atgtgtgttc agaggcaggt ttcccccttc tcacatgttg 600
ggaactcata gtttttcacc catctcatgg aatttgcagc agtgtgctgt gaggccgagg 660
tgggaggatc acttgagccc agcagtttga gaccagcctg ggcaacatgg caagacccag 720
tettggtetg tacaaaaaat taaataatag etgggcatgg tggcatatgt etgtaatece 780
agctatcagg aggctgaggc aggagcatca cctgagccca ggagtttgaa gctgcagtga 840
gctattgttg tgtcagagta ctccagcctg ggtgacagag caagaccctg tttctaaata 900 aacagactat tttttaaagc agttttagtt tcatgtagat ttctacatat ggtgtgaggc 960
aaggggteta acttcattct tttgcatgta gctatccagt tgtcctagag ccatttgttg 1020
aaaggatgtt tgtttctcac cgaattggca c
                                                                       1051
<210> 149
<211> 586
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7500299CB1
<400> 149
gccggccgcg cgctgggaag tcggtgccgc tgccgtctct gcgttcgcca tgcgtcccgg 60
ggcgccaggg ccactctggc ctctgccctg gggggccctg gcttgggccg tgggcttcgt 120 gagctccatg ggctcgggga accccgcgcc cgagtcctgt gagcacgtgg tgtgcccgcg 180
gccacagtcg tgcgtcgtgg accagacggg cagcgccac tgcgtggtgt gtcgagcggc 240
gecetgeect gtgeeeteea geeeeggeea ggagetttge ggeaacaaca acgteaccta 300
catchecteg tgccacatge gecaggecae etgetteetg ggecgeteea teggegtgeg 360
ccacgcgggc agctgcgcag gcacccctga ggagccgcca ggtggtgagt ctgcagaaga 420
ggaagagaac ttcgtgtgag cctgcaggac aggcctgggc ctggtgcccq aggccccca 480
teateceetg ttatttattg ceaeageaga gtetaattta tatgecaegg acaeteetta 540
gagcccggat tcggaccact tggggatccc agaacctccc tgacga
<210> 150
<211> 3110
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7480218CB1
<400> 150
gccacctggc agactaacga agcagctccc ttcccacccc aactgcaggt ctaattttgg 60
acgettgcct gccatttctt ccaggttgag ggagccgcag aggcggaggc tcqcqtattc 120
etgeagteag cacceaegte geeceeggae geteggtget caggecette gegageggga 180
ctctccgtct gcggtccctt gtgaaggctc tgggcggctg cagaggccgg ccgtccggtt 240
tggctcacct ctcccaggaa acttcacact ggagagccaa aaggagtgga agagcctgtc 300
ttggagattt tcctggggaa atcctgaggt cattcattat gaagtgtacc gcgcgggagt 360
ggctcagagt aaccacagtg ctgttcatgg ctagagcaat tccagccatg gtggttccca 420
atgccacttt attggagaaa cttttggaaa aatacatgga tgaggatggt gagtggtgga 480
tagccaaaca acgagggaaa agggccatca cagacaatga catgcagagt attttggacc 540
ttcataataa attacgaagt caggtgtatc caacagcctc taatatggag tatatgacat 600
gggatgtaga gctggaaaga tctgcagaat cctgggctga aagttgcttg tgggaacatq 660
gacctgcaag cttgcttcca tcaattggac agaatttggg agcacactgg ggaagatata 720 ggcccccgac gtttcatgta caatcgtggt atgatgaagt gaaagacttt agctacccat 780
atgaacatga atgcaaccca tattgtccat tcaggtgttc tggccctgta tgtacacatt 840
atacacaggt cgtgtgggca actagtaaca gaatcggttg tgccattaat ttgtgtcata 900
acatgaacat ctgggggcag atatggccca aagctgtcta cctggtgtgc aattactccc 960
caaagggaaa ctggtggggc catgccctt acaaacatgg gcggccctgt tctgcttgcc 1020
cacctagttt tggagggggc tgtagagaaa atctgtgcta caaagaaggg tcagacaggt 1080
```

```
attatccccc tcgagaagag gaaacaaatg aaatagaacg acagcagtca caagtccatg 1140
 acacccatgt ccggacaaga tcagatgata gtagcagaaa tgaagtcata agctcacagc 1200
aaatgtccca aattgtttct tgtgaagtaa gattaagaga tcagtgcaaa ggaacaacct 1260 gcaataggta cgaatgtcct gctggctgtt tggatagtaa agctaaagtt attggcagtg 1320
 tacattatga aatgcaatcc agcatctgta gagctgcaat tcattatggt ataatagaca 1380
 atgatggtgg ctgggtagat atcactagac aaggaagaaa gcattatttc atcaagtcca 1440
 atagaaatgg tattcaaaca attggcaaat atcagtctgc taattccttc acagtctcta 1500
aagtaacagt tcaggctgtg acttgtgaaa caactgtgga acagctctgt ccatttcata 1560
 agcetgette acattgecca agagtatact gteetegtaa etgtatgeaa geaaateeae 1620
 attatgctcg tgtaattgga actcgagttt attctgatct gtccagtatc tgcagagcag 1680
 cagtacatgc tggagtggtt cgaaatcacg gtggttatgt tgatgtaatg cctgtggaca 1740
 aaagaaagac ctacattgct tcttttcaga atggaatctt ctcagaaagt ttacagaatc 1800
ctccaggagg aaaggcattc agagtgtttg ctgttgtgtg aaactgaata cttggaagag 1860 gaccataaag actattccaa atgcaatatt tctgaatttt gtataaaact gtaacattac 1920
 tgtacagagt acatcaacta ttttcagccc aaaaaggtgc caaatgcata taaatcttga 1980
 taaacaaagt ctataaaata aaacatggga cattagcttt gggaaaagta atgaaaatat 2040
aatggtttta gaaatcctgt gttaaatatt gctatatttt cttagcagtt atttctacag 2100
 ttaattacat agtcatgatt gttctacgtt tcatatatta tatggtgctt tgtatatgcc 2160
actaataaaa tgaatctaaa cattgaatgt gaatggccct cagaaaatca tctagtgcat 2220
 ttaaaaataa tegaetetaa aaetgaaaga aaeettatea eatttteeee agtteaatge 2280
 tatgecatta ecaaetecaa ataateteaa ataattttee aettaataae tgtaaagttt 2340
 ttttctgtta atttaggcat atagaatatt aaattctgat attgcacttc ttattttata 2400
taaaataatc ctttaatatc caaatgaatc tgttaaaatg tttgattcct tgggaatggc 2460
cttaaaaata aatgtaataa agtcagagtg gtggtatgaa aacattccta gtgatcatgt 2520 agtaaatgta gggttaagca tggacagcca gagctttcta tgtactgtta aaattgaggt 2580
cacatatttt cttttgtatc ctggcaaata ctcctgcagg ccaggaagta taatagcaaa 2640
aagttgaaca aagatgaact aatgtattac attaccattg ccactgattt ttttttaaat 2700
ggtaaatgac cttgtatata aatattgcca tatcatggta cctataatgg tgatatattt 2760
gtttctatga aaaatgtatt gtgctttgat actaaaaatc tgtaaaatgt tagttttggt 2820
aattttttt ctgctggtgg atttacatat taaatttttt ctgctggtgg ataaacatta 2880
aaattaatca tgtttcaaag ttttattttc agttcctttt gcatgcctat ttcgatttag 2940.
aaatcacttt aagataaatg aacaaaatta tggtaagtct tctaaacttg gtttattgac 3000
gttagtataa ataacataca ataccagaaa aacaacaaaa aagggcgacc cgcgacaagg 3060
gcgctcgtaa acccggaaat tattcccgga ccggaacctg caggctttca
<210> 151
<211> 1852
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501159CB1
<400> 151
atggcagttt ctggatttac tcttggtacc tgcatacttc tgttgcacat tagttatgtg 60
gctaattatc ccaatggaaa agtaacacag tcatgccatg gaatgattcc tgaacatggt 120
catagtecae agtetgttee tgtteatgae atttacgtga gteagatgae atteaggeea 180
ggagatcaga ttgaagttac tttgtcaggg catccattta aaggetttet cetagaageg 240
cgtaatgctg aggatctgaa tggccctcct attggctcct tcacattgat tgacagtgaa 300
gtgtcacaac ttttgacctg tgaagatata cagggatcag cagtgagtca cagaagtgca 360
tetaaaaaaa cagaaattaa agtetaetgg aatgeteeaa geagtgetee aaateacaca 420
cagtttctgg tcacagttgt tgagaagtat aaaatctact gggtgaagat tcctggtcct 480
ataatttcac aaccaaatgc atttcctttt acaacaccta aagctacagt agtacctttg 540
ccaacgttac ctcccgtttc ccacttaacc aaaccattca gtgcctcaga ttgtgggaac 600
aagaagttet gtattaggag teetttgaac tgtgacccag agaaggagge tteetgtgte 660
ttcttgtcct tcacaagaga tgaccaatcg gtgatggttg aaatgagcgg ccccagtaaa 720
ggctatttat cctttgcatt gtctcatgat cagtggatgg gtgatgatga tgcttatctg 780
tgtattcatg aagatcagac tgtgtacatc cagccttccc atttaacggg gcgaagtcac 840
cctgtaatgg actccagggt aggtaccctt gaggatatgg cttggaggtt ggcggacggt 900
gttatgcagt gttctttcag aagaaacatt acccttcctg gagttaagaa tagatttgat 960
ctaaacacaa gctattacat atttctagca gatggtgcag ctaatgatgg tcgaatttac 1020
aagcactete agcaacettt gattacetat gaaaaatatg atgtgacaga etetecaaag 1080
aacataggag gatcccattc tgtactcctt ctgaaggttc atggtgcatc ggatgctcat 1140
gttcaccaca actgtcctca cctgcattgc ttttgttatg ccgtttatat acaggggagg 1200
ctggagtagg catgcaggtt accacccata cctcggctgt atagtgatga ctttggcagt 1260
tetteageet ettetggeag tetteaggee acetttacat gacceaagaa ggeaaatgtt 1320
```

```
taactggact cattggagta tgggaacagc tgctagaata atagcagact taaaacaatc 1380
 tggaaaatgt gggtgcatct cttttaagga ttggtagatt acgcagccat aaaaaagaat 1440
gaagtcatgt cttttgtagc aacatggatg ctgctggaag tgattatcct acatgaatta 1500
atgcagaaac agaaaatcac ataccacatg ttctcactta taaattggca gcgatgttcc 1560
 tgggaatgga tttaccagga ctgaatcttc ctgattcatg gaaaacctat gcaatgaccg 1620
gattcgtagc ctggcatgtt gggactgagg ttgttctgga ggtacatgct tatcggctct 1680
ctcgcaaagt tgaaatattg gatgatgaca gaattcagat ccttcagtca tttactgcag 1740 tggaaacaga gggtcatgct tttaaaaagg cagtgttggc aatttatgtc tgtgggaatg 1800
ttacttttct catcatattt ttatctgcaa tcaaccatct atgagggcgc gg
<210> 152
<211> 2057
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501932CB1
<400> 152
gtggggggtt agccccagag aggacaggtg cttggcctca gcttgctcag catgcaagag 60
gtagaaatgg gaatggaagt tgggtcctga gcccaaggct tccgctctgc tcaggcacca 120
ccctgctgca gattaggaag gactttgtct ggacccccc ggggcacggc cccaactctc 180
cctgggttag accgaggccg gtgctctgga ggctggcctg gggtggcgtg gggagggct 240 gcctggtgtc tgcaggcatg gttggttgtc tgagaaagga catcacagcc aatcctggcc 300
ttetettgtt gettgteeeg tgggeeegea ceacaggeee agetgagage cageetggag 360
gttacccagc agcaggccac ccaggccgaa ggccagctac tagagctgcg caagcaaagc 420
agccagatcc aggtacgagg cetgtgcetg eccgeecace atggeeteac actgeatect 480 ggggeggeca ecagetggte ectggaacac caggeagcag ggagtgggge tgageaggga 540
gctgggcaca ggggtcctgg ggaggttccc gggaccctgc ctccccacat ccctggccct 600
cageceagea ggeageeetg geeetageet eeettggtat ggeacaggge cetggecace 660
etgaageece teetgtteee geecagaact eggeetgeat ettggeetee tgggteteeg 720
gcaagttcag cagcctgcta caggccctgg aaatacagca cacgacagca ctgaggagca 780
tcgaggtggc caagacgcag gcgctggcac aggctcgaga cgaggagcag cggctgcggg 840
tecatttgga ggetgtgget egecatgget geaggateeg ggageteetg gageaggtgg 900
atgagcagac cttcctgcag gaatcgcagc tcctccagcc cccagggcct cttgggccac 960 tgacccctct gcagtgggat gaagaccaac agctgggtga cctgaagcag ttgctaagcc 1020
ggctgtgtgg cctcctcttg gaagaggga gccaccctgg ggcaccagcc aagcctgtgg 1080
acttagecce egtggaggee ceaggteece tggcaceggt cecaageaca gtttgteeac 1140
tgaggaggaa actctggcag aattatcgca atctgacctt tgatccagtc agcgccaacc 1200
gtcacttcta tctgtcgcgc caggaccagc aggtgaagca ctgtcgtcag tcccggggcc 1260 caggcgggcc cggcagcttt gagctctggc aggtgcaatg tgcccagagc ttccaggccg 1320
ggcaccacta ctgggaggtg cgcgcgtcag accactcggt gacactgggc gtctcctacc 1380
cgcaactgcc acggtgcagg ctggggcccc acacagacaa cattggccgg ggaccctgct 1440
cctgggggct ctgcgtccag gaggacagcc tccaggcctg gcacaacggg gaagcccagc 1500 gcctcccagg ggtgtcaggg cggctcctgg gcatggattt ggacctggcc tcaggctgcc 1560
teacetteta cageetggag ecceagacee ageeeetgta caeettecat geeetettea 1620
accagecect cacecegte thetagetee tegagggtag gaccetgace etgtgccate 1680 agecagggge tgtgtteeet eeggggeeee aggaagaggt geteagetga agaaggeatg 1740
ggatggagcc ctggcatagc tgccaccatg cctatgtgcc caagagctgc ccagcttcag 1800
cttggggact ggaggaccag ctgttggcct ctctgttaac tcagaaagag atgggaggtt 1860
gggggaggtg agcataaacg cagagttcac tgttgcagcc tttttgaagg ggacacagtc 1920
taggaggggg ataaatggga tgcccttgcc ccagagagaa cccagttcta ggtactgtct 1980
gggcctggga ggcgagagca gtgcccaggg gacttctggg cttacaggac agcgtgtgtg 2040
acaaattcag atctacc
<210> 153
<211> 1848
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501111CB1
<220>
<221> unsure
```

```
<222> 1800, 1806-1807
<223> a, t, c, g, or other
·<400> 153
gccagtgagc tgctgtggct cagatactga tactttcttt ccaaacagca taagaagtga 60
ttgagccaca agtatactga aggaagggct ccctcgagtt gtggtgtgaa gagataaatc 120
accagtcaca gactatgcac ccgactgctg ctgttcagtc cagggaaaat gaaagttgga 180
gtgctgtggc tcatttcttt cttcaccttc actgacggcc acggtggctt cctggggaaa 240
aatgatggca tcaaaacaaa aaaagaactc attgtgaata agaaaaaaca tctaggccca 300
gtcgaagaat atcagctgct gcttcaggtg acctatagag attccaagga gaaaagagat 360
ttgagaaatt ttctgaagct cttgaagcct ccattattat ggtcacatgg gctaattaga 420
attatcagag caaaggctac cacagactgc aacagcctga atggagtcct gcagtgtacc 480 tgtgaagaca gctacacctg gtttcctccc tcatgccttg atccccagaa ctgctacctt 540
cacacggetg gageactece aagetgtgaa tgteatetea acaaceteag ceagagtgte 600
aatttctgtg agagaacaaa gatttggggc actttcaaaa ttaatgaaag gtttacaaat 660
gaccttttga attcatcttc tgctatatac tccaaatatg caaatggaat tgaaattcaa 720
cttaaaaaaag catatgaaag aattcaaggt tttgagtcgg ttcaggtcac ccaatttcgc 780
aatgctgtcc ttccacttgc agagacccaa tcctggagcc atcctgtgct ataatttctt 840
ttattgagaa atggaagcat cgttgctggg tatgaagttg ttggctccag cagtgcatct 900
gaactgctgt cagccattga acatgttgcc gagaaggcta agacagccct tcacaagctg 960
tttccattag aagacggctc tttcagagtg ttcggaaaag cccagtgtaa tgacattgtc 1020 tttggatttg ggtccaagga tgatgaatat accctgccct gcagcagtgg ctacagggga 1080
aacatcacag ccaagtgtga gtcctctggg tggcaggtca tcagggagac ttgtgtgctc 1140
tetetgettg aagaactgaa caagggattt tttatettat getttggaat actettggac 1200
agtaagctgc gacaacttct gttcaacaag ttgtctgcct taagttcttg gaagcaaaca 1260 gaaaagcaaa actcatcaga tttatctgcc aaacccaaat tctcaaagcc tttcaaccca 1320
ctgcaaaaca aaggccatta tgcattttct catactggag attcctccga caacatcatg 1380
ctaactcagt ttgtctcaaa tgaataaggc aaggaatcat aaaatcaaga aaaaatttcc 1440
agaacaactt gacatttaga gacaaatgtc aatgaagaaa ttatgctcag tattcgatcg 1500
ggttttctga tttaggggtc tgggaataaa acaagaatgt ctcagtggct tcattactgc 1560
tcccttttgt cttcaattaa atgaaaagaa gatttatttc catgtgattt gattcaaaga 1620
aagtgeteca taaatgeaga agagtaggtt ttgttggaaa tegtgteagt tgtaccetga 1680
ccataaaata tggtttctat tttcataaaa cagcattatt cacatggcat ttccaataat 1740
ctggattgaa ggaagaaaat taagggcgat tccagcacac tgcgccgtaa tactgagtcn 1800
cagggmnett ceggteeage etttgggggg aaagaggggt teeceet
<210> 154
<211> 1616
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<223> Incyte ID No: 7501113CB1
<220>
<221> unsure
<222> 1568, 1574-1575
<223> a, t, c, g, or other
tgccagtgag ctgctgtggc tcagatactg atactttctt tccaaacagc ataagaagtg 60
attgagccac aagtatactg aaggaagggc tccctcgagt tgtggtgtga agagataaat 120
caccagtcac agactatgca cccgactgct gctgttcagt ccagggaaaa tgaaagttgg 180
agtgctgtgg ctcatttctt tcttcacctt cactgacggc cacggtggct tcctggggaa 240
aaatgatggc atcaaaacaa aaaaagaact cattgtgaat aagaaaaaac atctaggccc 300
agtcgaagaa tatcagctgc tgcttcaggt gacctataga gattccaagg agaaaagaga 360
tttgagaaat tttctgaagc tcttgaagcc tccattatta tggtcacatg ggctaattag 420.
aattatcaga gcaaaggcta ccacagactg caacagcctg aatggagtcc tgcagtgtac 480
ctgtgaagac agctacacct ggtttcctcc ctcatgcctt gatccccaga actgctacct 540
tcacacgget ggagcactcc caagetgtga atgtcatctc aacaacctca gccagagtgt 600
caatttctgt gagagaacaa agatttgggg cactttcaaa attaatgaaa ggtttacaaa 660
tgacettttg aattcatett etgetatata etceaaatat gcaaatggaa ttgaaattca 720
acttaaaaaa gcatatgaaa gaattcaagg ttttgagtcg gttcaggtca cccaatttcg 780 aaatggaagc atcgttgctg ggtatgaagt tgttggctcc agcagtgcat ctgaactgct 840
gtcagccatt gaacatgttg ccgagaaggc taagacagcc cttcacaagc tgtttccatt 900
agaagacgge tettteagag tgtteggaaa agggattttt tatettatge tttggaatae 960
```

```
tettggacag taagetgega caacttetgt teaacaagtt gtetgeetta agttettgga 1020
agcaaacaga aaagcaaaac tcatcagatt tatctgccga acccaaattc tcaaagcctt 1080
tcaacccact gcaaaacaaa ggccattatg cattttctca tactggagat tcctccgaca 1140
acatcatgct aactcagttt gtctcaaatg aataaggcaa ggaatcataa aatcaagaaa 1200
aaatttccag aacaacttga catttagaga caaatgtcaa tgaagaaatt atgctcagta 1260
ttcgatcggg ttttctgatt taggggtctg ggaataaaac aagaatgtct cagtggcttc 1320
attattgctc ccttttgtct tcaattaaat gaaaagaaga tttatttcca tgtgatttga 1380
ttcaaagaaa gtgctccata aatgcagaag agtaggtttt gttggaaatc gtgtcagttg 1440 taccctgacc ataaaatatg gtttctattt tcataaaaca gcattattca catggcattt 1500
ccaataatct ggattgaagg aagaaaatta agggcgattc cagcacactg cgccgtaata 1560
ctgagtenea gggmnettee ggteeageet ttggggggaa agaggggtte cccct.
<210> 155
<211> 1568
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501118CB1
<220>
<221> unsure
<222> 1520, 1526-1527
<223> a, t, c, g, or other
<400> 155
gccagtgagc tgctgtggct cagatactga tactttcttt ccaaacagca taagaagtga 60
ttgagccaca agtatactga aggaagggct ccctcgagtt gtggtgtgaa gagataaatc 120
accagtcaca gactatgcac ccgactgctg ctgttcagtc cagggaaaat gaaagttgga 180
gtgctgtggc tcatttcttt cttcaccttc actgacggcc acggtggctt cctggggaaa 240
aatgatggca tcaaaacaaa aaaagaactc attgtgaata agaaaaaaca tctaggccca 300
gtcgaagaat atcagctgct gcttcaggtg acctatagag attccaagga gaaaagagat 360
ttgagaaatt ttctgaagct cttgaagcct ccattattat ggtcacatgg gctaattaga 420
attatcagag caaaggctac cacagactgc aacagcctga atggagtcct gcagtqtacc 480
tgtgaagaca gctacacctg gtttcctccc tcatgccttg atccccagaa ctgctacctt 540 cacacggctg gagcactccc aagctgtgaa tgtcatctca acaacctcag ccagagtgtc 600
aatttctgtg agagaacaaa gatttggggc actttcaaaa ttaatgaaag gtttacaaat 660
gaccttttga attcatcttc tgctatatac tccaaatatg caaatggaat tgaaattcaa 720
cccagtgtaa tgacattgtc tttggatttg ggtccaagga tgatgaatat accctgccct 780
gcagcagtgg ctacagggga aacatcacag ccaagtgtga gtcctctggg tggcaggtca 840 tcagggagac ttgtgtgctc tctctgcttg aagaactgaa caagggattt tttatcttat 900
getttggaat actettggac agtaagetge gacaacttet gttcaacaag ttgtctgcct 960
taagttettg gaagcaaca gaaaagcaaa acteateaga tttatetgee aaacceaaat 1020 teteaaagee ttteaceea etgeaaaaca aaggeeatta tgeatttet catactggag 1080 atteeteega caacateatg etaacteagt ttgeteeaaa tgaataagge aaggaateat 1140
aaaatcaaga aaaaatttcc agaacaactt gacatttaga gacaaatgtc aatgaagaaa 1200
ttatgctcag tattcgatcg ggttttctga tttaggggtc tgggaataaa acaagaatgt 1260 ctcagtggct tcattactgc tcccttttgt cttcaattaa atgaaaagaa gatttatttc 1320
catgtgattt gattcaaaga aagtgctcca taaatgcaga agagtaggtt ttgttggaaa 1380
tcgtgtcagt tgtaccctga ccataaaata tggtttctat tttcataaaa cagcattatt 1440
cacatggcat ttccaataat ctggattgaa ggaagaaaat taagggcgat tccagcacac 1500
tgcgccgtaa tactgagtcn cagggmnctt ccggtccagc ctttgggggg aaagaggggt 1560
tccccct
                                                                             1568
<210> 156
<211> 1799
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501128CB1
<400> 156
gtggctcaga tactgatact ttctttccaa acagcataag aagtgattga gccacaagta 60
tactgaagga agggctccct cgagttgtgg tgtgaagaga taaatcacca gtcacagact 120
```

```
atgcacccga ctgctgctgt tcagtccagg gaaaatgaaa gttggagtgc tgtggctcat 180
ttetttette acetteactg acggecacgg tggetteetg gggaaaaatg atggeatcaa 240
aacaaaaaa gaactcattg tgaataaaaa aaaacatcta ggcccattcg aagaatatca 300 gctgctgctt caggtgacct atagagattc caaggagaaa agagatttga gaaattttct 360
gaagctcttg aagcctccat tattatggtc acatgggcta attagaatta tcagagcaaa 420
ggctaccaca gactgcaaca gcctgaatgg agtcctgcag tgtacctqtg aagacagcta 480
cacctggttt cctccctcat gccttgatcc ccagaactgc taccttcaca cggctggagc 540
actcccaagc tgtgaatgtc atctcaacaa cctcagccag agtgtcaatt tctgtgagag 600 aacaaagatt tggggcactt tcaaaattaa tgaaaggttt acaaatgacc ttttgaattc 660
atcttctgct atatactcca aatatgcaaa tggaattgaa attcaactta aaaaagcata 720
tgaaagaatt caaggttttg agtcggttca ggtcacccaa tttcgcaatg ctgtccttcc 780
acttgcagag acccaatcct ggagccatcc tgtgctataa tttcttttat tgagaaatgg 840 aagcatcgtt gctgggtatg aagttgttgg ctccagcagt gcatctgaac tgctgtcagc 900
cattgaacat gttgccgaga aggctaagac agcccttcac aagctgtttc cattagaaga 960
cggctctttc agagtgttcg gaaaagccca gtgtaatgac attgtctttg gatttgggtc 1020
caaggatgat gaatataccc tgccctgcag cagtggctac agggggaaaca tcacagccaa 1080 gtgtgagtcc tctgggtggc aggtcatcag ggagacttgt gtgctctctc tgcttgaaga 1140
actgaacaag gatgtcatca gtatagctga caatatcctt aattcagcct cagtaaccaa 1200
ctggacagtc ttactgcggg aagaaaagta tgccagctca cggttactag agacattaga 1260
aaacatcagc actctggtgc ctccgacagc tcttcctctg aatttttctc ggaaattcat 1320
tgactggaaa gggattccag tgaacaaaag ccaactcaaa aggggttaca gctatcagat 1380
taaaatgtgt ccccaaaata catctattcc catcagaggc cgtgtgttaa ttgggtcaga 1440
ccaattccag agatccettc cagaaactat tatcagcatg gcctcgttga ctctggggaa 1500
cattctaccc gtttccaaaa atggaaatgc tcaggtcaat ggacctgtga tatccacggt 1560 tattcaaaac tattccataa atgaagtttt cctattttt tccaagatag agtcaaacct 1620
gagccagcct cattgtgtgt tttgggattt cagtcatttg cagtggaacg atgcaggctg 1680
ccacctagtg aatgaaactc aagacatcgt gacgtgccaa tgtactcact tgacctcctt 1740 ctccatattg atgtcacctt ttgtcccctc tacaatcttc cccgttgtaa aatggatcc 1799
<210> 157
<211> 3395 ·
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7501920CB1
<400> 157
ggatcagtga gcctgtgttc atgccagtga gctgctgtgg ctcagatact gatactttct 60
ttccaaacag cataagaagt gattgagcca caagtatact gaaggaaggg ctccctcgag 120
ttgtggtgtg aagagataaa tcaccagtca cagactatgc acccgactgc tgctgttcag 180
tccagggaaa atgaaagttg gagtgctgtg gctcatttct ttcttcacct tcactgacgg 240
ccacggtggc ttcctggggg gcccagtcga agaatatcag ctgctgcttc aggtgaccta 300
tagagattcc aaggagaaaa gagatttgag aaattttctg aagctcttga agcctccatt 360
attatggtca catgggctaa ttagaattat cagagcaaag gctaccacag actgcaacag 420
cetgaatgga gtcetgeagt gtacetgtga agacagetae acetggttte etceetcatg 480 cettgatece cagaactget acetteacae ggetggagea etcecaaget gtgaatgtea 540
tetcaacaac etcagecaga gtgtcaattt etgtgagaga acaaagattt ggggcaettt 600
caaaattaat gaaaggttta caaatgacct tttgaattca tcttctgcta tatactccaa 660
atatgcaaat ggaattgaaa ttcaacttaa aaaagcatat gaaagaattc aaggttttga 720
gtcggttcag gtcacccaat ttcgaaatgg aagcatcgtt gctgggtatg aagttgttgg 780
ctccagcagt gcatctgaac tgctgtcagc cattgaacat gttgccgaga aggctaagac 840
agcccttcac aagctgtttc cattagaaga cggctctttc agagtgttcg gaaaagccca 900
gtgtaatgac attgtetttg gatttgggtc caaggatgat gaatataccc tgccctgcag 960 cagtggctac aggggaaaca tcacagccaa gtgtgagtcc tctgggtggc aggtcatcag 1020
ggagacttgt gtgctctctc tgcttgaaga actgaacaag aatttcagta tgattgtagg 1080
caatgccact gaggcagctg tgtcatcctt cgtgcaaaat ctttctgtca tcattcggca 1140
aaacccatca accacagtgg ggaatctggc ttcggtggtg tcgattctga gcaatatttc 1200 atctctgtca ctggccagcc atttcagggt gtccaattca acaatggagg atgtcatcag 1260 tatagctgac aatatcctta attcagcctc agctaaccaa ctggacagtc ttactgcggg 1320
aagaaaagta tgccagctca cggttactag agacattaga aaacatcagc actctggtgc 1380
ctccgacagc tcttcctctg aatttttctc ggaaattcat tgactggaaa gggattccag 1440
tgaacaaaag ccaactcaaa aggggttaca gctatcagat taaaatgtgt ccccaaaata 1500
catctattcc catcagaggc cgtgtgttaa ttgggtcaga ccaatttcca gagatccctt 1560
ccagaaacta ttatcagcat ggccctcgtt gactctgggg aacattctac ccgtttccaa 1620
aaatggaaat gctcaggtca atggacctgt gatatccacg gttattcaaa actattccat 1680
```

```
aaatgaagtt ttcctatttt tttccaagat agagtcaaac ctgagccagc ctcattgtgt 1740
 gttttgggat ttcagtcatt tgcagtggaa cgatgcaggc tgccacctag tgaatgaaac 1800
 tcaagacatc gtgacgtgcc aatgtactca cttgacctcc ttctccatgt tgatgtcacc 1860
 ttttgtcccc tctacaatct tccccgttgt aaaatggatc acctatgtgg gactgggtat 1920
 ctccattgga agtctcattt tatgcctgat catcgaggct ttgttttgga agcagattaa 1980
 aaaaagccaa acctctcaca cacgtcgtat ttgcatggtg aacatagccc tgtccctctt 2040
 gattgctgat gtctggttta ttgttggtgc cacagtggac accacggtga acccttctgg 2100
 agtetgeaca getgetgtgt tetttacaca ettettetac etetetttgt tettetggat 2160
 gctcatgctt ggcatcctgc tggcttaccg gatcatcctc gtgttccatc acatggccca 2220
 gcatttgatg atggctgttg gattttgcct gggttatggg tgccctctca ttatatctgt 2280
 cattaccatt gctgtcacgc aacctagcaa tacctacaaa aggaaagatg tgtgttggct 2340
 taactggtcc aatggaagca aaccactcct ggcttttgtt gtccctgcac tggctattgt 2400
 ggctgtgaac ttcgttgtgg tgctgctagt tctcacaaag ctctggaggc cgactgttgg 2460
 ggaaagactg agtcgggatg acaaggccac catcatccgc gtggggaaga gcctcctcat 2520
 totgacccet ctgctagggc tcacctgggg ctttggaata ggaacaatag tggacagcca 2580
gaatetgget tggcatgtta tttttgcttt actcaatgca ttccagggat tttttatctt 2640
atgetttgga atactettgg acagtaaget gegacaaett etgtteaaca agttgtetge 2700
cttaagttct tggaagcaaa cagaaaagca aaactcatca gatttatctg ccaaacccaa 2760
atteteaaag cettteaace caetgeaaaa caaaggeeat tatgeatttt eteataetgg 2820
agattcctcc gacaacatca tgctaactca gtttgtctca aatgaataag gcaaggaatc 2880 ataaaatcaa gaaaaaattt ccagaacaac ttgacattta gagacaaatg tcaatgaaga 2940
aattatgctc agtattcgat cgggttttct gatttagggg tctgggaata aaacaagaat 3000
gtctcagtgg cttcattact gctccctttt gtcttcaatt aaatgaaaag aagatttatt 3060 tccatgtgat ttgattcaaa gaaagtgctc cataaatgca gaagagtagg ttttgttgga 3120
aatcgtgtca gttgtaccct gaccataaaa tatggtttct attttcataa aacagcatta 3180
ttcacatggc atttccaata atctggattg aaggaagaaa attttatgaa atagctttag 3240
ataaattaat aggccacgtt cattttcttg tcaaaaagtt actggtgggg ggatggtggg 3300
aaaaagttat tagtgcaaat ttcctagaga aaaaaccatt tctctttcaa attttccagt 3360
tgaattttat gttcgctttt gcttcttagg ttcta
                                                                       3395
<210> 158
<211> 3567
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7510325CB1
gtggctcaga tactgatact ttctttccaa acagcataag aagtgattga gccacaagta 60
tactgaagga agggctccct cgagttgtgg tgtgaagaga taaatcacca gtcccagtcg 120
aagaatatca gctgctgctt caggtgacct atagagattc caaggagaaa agagatttga 180
gaaattttct gaagetettg aageetecat tattatggte acatgggeta attagaatta 240
tcagagcaaa ggctaccaca gactgcaaca gcctgaatgg agtcctgcag tgtacctgtg 300
aagacagcta cacctggttt cctccctcat gccttgatcc ccagaactgc taccttcaca 360
cggctggagc actcccaagc tgtgaatgtc atctcaacaa cctcagccag agtgtcaatt 420
tctgtgagag aacaaagatt tggggcactt tcaaaattaa tgaaaggttt acaaatgacc 480
ttttgaattc atcttctgct atatactcca aatatgcaaa tggaattgaa attcaactta 540
aaaaagcata tgaaagaatt caaggttttg agtcggttca ggtcacccaa tttcgaaatg 600
gaagcatcgt tgctgggtat gaagttgttg gctccagcag tgcatctgaa ctgctgtcag 660
ccattgaaca tgttgccgag aaggctaaga cagcccttca caagctgttt ccattagaag 720
acggetettt cagagtgtte ggaaaageee agtgtaatga cattgtettt ggatttgggt 780
ccaaggatga tgaatatacc ctgccctgca gcagtggcta caggggaaac atcacagcca 840
agtgtgagtc ctctgggtgg caggtcatca gggagacttg tgtgctctct ctgcttgaag 900 aactgaacaa gaatttcagt atgattgtag gcaatgccac tgaggcagct gtgtcatcct 960
tcgtgcaaaa tctttctgtc atcattcggc aaaacccatc aaccacagtg gggaatctgg 1020
cttcggtggt gtcgattctg agcaatattt catctctgtc actggccagc catttcaggg 1080
tgtccaattc aacaatggag gatgtcatca gtatagctga caatatcctt aattcagcct 1140
cagctaacca actgggcagt cttactgcgg gaagaaaagt atgccagctc acggttacta 1200
gagacattag aaaacatcag cactctggtg cctccgacag ctcttcctct gaatttttct 1260
cggaaattca ttgactggaa agggattcca gtgaacaaaa gccaactcaa aaggggttac 1320
agetateaga ttaaaatgtg teeccaaaat acatetatte ecateagagg cegtgtgtta 1380
attgggtcag accaatttcc agagatccct tccagaaact attatcagca tggccctcgt 1440
tgactctggg gaacattcta cccgtttcca aaaatggaaa tgctcaggtc aatggacctg 1500
tgatatccac ggttattcaa aactattcca taaatgaagt titcctattt ttttccaaga 1560
tagagtcaaa cctgagccag cctcattgtg tgttttggga tttcagtcat ttgcagtgga 1620
```

```
acgatgcagg ctgccaccta gtgaatgaaa ctcaagacat cgtgacgtgc caatgtactc 1680
acttgacctc cttctccata ttgatgtcac cttttgcccc ctctacaatc ttccccgttg 1740
taaaatggat cacctatgtg ggactgggta tctccattgg aagtctcatt ttatgcctga 1800
tcatcgaggc tttgttttgg aagcagatta aaaaaagcca aacctctcac acacgtcgta 1860
tttgcatggt gaacatagcc ctgtccctct tgattgctga tgtctggttt attgttggtg 1920
ccacagtgga caccacggtg aaccettetg gagtetgeac agetgetgtg ttetttacae 1980
acticiteta cetetettig tiettetgga tgeteatget tggeateetg etggettace 2040 ggateateet egtgtieeat cacatggee ageatitgat gatggetgtt ggattitgee 2100 tgggtiatgg gtgeeetete attatatetg teattaceat tgetgteaeg caacetagea 2160
atacctacaa aaggaaagat gtgtgttggc ttaactggtc caatggaagc aaaccactcc 2220
tggcttttgt tgtccctgca ctggctattg tggctgtgaa cttcgttgtg gtgctgctag 2280
ttctcacaaa gctctggagg ccgactgttg gggaaagact gagtcgggat gacaaggcca 2340 ccatcatccg cgtggggaag agcctcctca ttctgacccc tctgctaggg ctcacctggg 2400 gctttggaat aggaacaata gtggacagcc agaatctggc ttggcatgtt atttttgctt 2460
tactcaatgc attccaggga ttttttatct tatgctttgg aatactcttg gacagtaagc 2520
tgcgacaact tctgttcaac aagttgtctg ccttaagttc ttggaagcaa acagaaaagc 2580
aaaactcatc agatttatct gccaaaccca aattctcaaa gcctttcaac ccactgcaaa 2640
acaaaggcca tratgcattt teteatactg gagatteete egacaacate atgctaacte 2700
agtttgtctc aaatgaataa ggcaaggaat cataaaatca agaaaaaatt tccagaacaa 2760
cttgacattt agagacaaat gtcaatgaag aaattatgct cagtattcga tcgggttttc 2820 tgatttaggg gtctgggaat aaaacaagaa tgtctcagtg gcttcattac tgctcccttt 2880
tgtcttcaat taaatgaaaa gaagatttat ttccatgtga tttgattcaa agaaagtgct 2940
ccataaatgc agaagagtag gttttgttgg aaatcgtgtc agttgtaccc tgaccataaa 3000
atatggtttc tattttcata aaacagcatt attcacatgg catttccaat aatctggatt 3060
gaaggaagaa aattttatga aatagcttta gataaattaa taggccacgt tcattttctt 3120
gtcaaaaagt tactggtggg gggatggtgg gaaaaagtta ttagtgcaaa tttcctagag 3180
aaaaaaccat ttctctttca aattttccag ttgaatttta tgttcgcttt tgcttcttag 3240
gttctatcac ttaatattga aagttaatca gaaataaaat gtaaacttct atttcagata 3300 gctttgtaac catttatcag aaagtataat aatgtgatat gatatataat gtggtatttt 3360
tcagtttaca aggcacttcc atctggtcct aaaccctgca aacaaaagtg tcaaggcaga 3420
cctagtgcag agatgagggc atgggggctc agagaggtaa agtgacttgc caaagattgt 3480
gaagccagtt aagggaaatt ggggattttt aggacatttg tctcccagac catttctaca 3540
gccaataaaa gccttgaaaa ttaccta
<210> 159
<211> 1906
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7510966CB1
gtggctcaga tactgatact ttctttccaa acagcataag aagtgattga gccacaagta 60
tactgaagga agggctccct cgagttctgg tgtgaagaga taaatcacca ggcccagtcg 120
aagaatatca gctgctgctt caggtgacct atagagattc caaggagaaa agagatttga 180
gaaattttct gaagetettg aageeteeat tattatggte acatgggeta attagaatta 240
tcagagcaaa ggctaccaca gactgcaaca gcctgaatgg agtcctgcag tgtacctgtg 300
aagacagcta cacetggttt ceteceteat geettgatee ecagaactge tacetteaca 360
cggctggagc actcccaagc tgtgaatgtc atctcaacaa cctcagccag agtgtcaatt 420 tctgtgagag aacaaagatt tggggcactt tcaaaattaa tgaaaggttt acaaatgacc 480
ttttgaattc atcttctgct atatactcca aatatgcaaa tggaattgaa attcaactta 540
aaaaagcata tgaaagaatt caaggttttg agtcggttca ggtcacccaa tttcgcaatg 600
ctgtccttcc acttgcagag acccaatcct ggagccatcc tgtgctataa tttctttat 660
tgagaaatgg aagcatcgtt gctgggtatg aagttgttgg ctccagcagt gcatctgaac 720
tgctgtcagc cattgaacat gttgccgaga aggctaagac agcccttcac aagctgtttc 780
cattagaaga cggctcttc agagtgttcg gaaaagggat tttttatctt atgctttgga 840 atactcttgg acagtaagct gcgacaactt ctgttcaaca agttgtctgc cttaagttct 900
tggaagcaaa cagaaaagca aaactcatca gatttatctg ccaaacccaa attctcaaag 960
cctttcaacc cactgcaaaa caaaggccat tatgcatttt ctcatactgg agattcctcc 1020
gacaacatca tgctaactca gtttgtctca aatgaataag gcaaggaatc ataaaatcaa 1080
gaaaaaattt ccagaacaac ttgacattta gagacaaatg tcaatgaaga aattatgctc 1140
agtattcgat cgggttttct gatttagggg tctgggaata aaacaagaat gtctcagtgg 1200
cttcattact gctccctttt gtcttcaatt aaatgaaaag aagatttatt tccatgtgat 1260
ttgattcaaa gaaagtgctc cataaatgca gaagagtagg ttttgttgga aatcgtgtca 1320
gttgtaccct gaccataaaa tatggtttct attttcataa aacagcatta ttcacatggc 1380
```

```
atttccaata atctggattg aaggaagaaa attttatgaa atagctttag ataaattaat 1440
 aggccacgtt cattttcttg tcaaaaagtt actggtgggg ggatggtggg aaaaagttat 1500
 tagtgcaaat ttcctagaga aaaaaccatt tctctttcaa attttccagt tgaattttat 1560 gttcgctttt gcttcttagg ttctatcact taatattgaa agttaatcag aaataaaatg 1620
 taaactteta titeagatag ettigtaace attiateaga aagtataata aigigataig 1680
 atatataatg tggtattttt cagtttacaa ggcacttcca tctggtccta aaccctgcaa 1740
 acaaaagtgt caaggcagac ctagtgcaga gatgagggca tggggggctca gagaggtaaa 1800
gtgacttgcc aaagattgtg aagccagtta agggaaattg gggattttta ggacatttgt 1860
ctcccagacc atttctacag ccaataaaag ccttgaaaat taccta
 <210> 160
 <211> 2122
 <212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 7386101CB1
<400> 160
ccctcagcgc gcgaggcccg cggtcccttt aagacgcccg gggcccgcct ggctctcgcc 60
geogeoggge catggeogeg cagetgetgg aggagaaget gacetgegee atetgeotgg 120
ggctctacca ggacccagtg acgctgccct gcggccacaa cttctgcggg gcctgcatcc 180
gggactggtg ggaccgctgc ggaaaggcgt gccccgagtg ccgggagccc tttcccgacg 240
gcgccgagct gcgccgcaac gtggccctca gcggcgtgct ggaggtggtg cgcgccgggc 300
cegeceggga teceggeece gateceggee eeggeecega ceetgeegeg egetgeecee 360
gccacgggcg gccgctggag ctcttctgcc ggaccgaggg ccgctgtgtg tgcagcgtgt 420
gcaccgtgcg cgagtgtcgc ctccacgagc gggcgctgct ggatgccgag cgcctcaagc 480 gcgaggccca gctgagagcc agcctggagg ttacccagca gcaggccacc caggccgaag 540
gccagctact agagctgcgc aagcaaagca gccagatcca gaactcggcc tgcatcttgg 600
cctcctgggt ctccggcaag ttcagcagcc tgctacaggc cctggaaata cagcacacga 660
cagcactgag gagcatcgag gtggccaaga cgcaggcgct ggcacaggct cgagacgagg 720 agcagcggct gcgggtccat ttggaggctg tggctcgcca tggctgcagg atccgggagc 780
teetggagea ggtggatgag cagacettee tgeaggaate geageteete cageeceeag 840
ggcctcttgg gccactgacc cctctgcagt gggatgaaga ccaacagctg ggtgacctga 900
agcagttgct aagccggctg tgtggcctcc tcttggaaga ggggagccac cctggggcac 960
cagccaagcc tgtggactta gccccgtgg attatcgcaa tctgaccttt gatccagtca 1020
gegecaaceg teacttetat etgtegegee aggaceagea ggtgaageae tgtegteagt 1080
cccggggccc aggcgggccc ggcagctttg agctctggca ggtgcaatgt gcccagagct 1140
tecaggeegg geaceactae tgggaggtge gegegteaga ceacteggtg acactgggeg 1200 tetectacee geaactgeea eggtgeagge tggggeecea cacagacaac attggeeggg 1260
gaccetgete etgggggete tgegtecagg aggacageet ecaggeetgg cacaacgggg 1320
aagcccaggg ceteccaggg gtgtcaggge ggeteetggg catggatttg gacetggeet 1380 caggetgeet cacettetae agcetggage eccagacea geeeetgtae acettecatg 1440 ceetetteaa ecageceete acecegtet tetggeteet egagggtagg aceetgacee 1500
tgtgccatca gccaggggct gtgttccctc tggggcccca ggaagaggtg ctcagctgaa 1560
gaaggcatgg gatggagccc tggcatagct gccaccatgc ctatgtgccc aagagctgcc 1620
cagettcage ttggggactg gaggaccage tgttggccte tetgttaact cagaaagaga 1680
tgggaggttg ggggaggtga gcataaacgc agagttcact gttgcagcct ttttgaaggg 1740
gacacagtct aggaggggga taaatgggat gcccttgccc cagagagaac ccagttctag 1800
gtactgtctg ggcctgggag gcgagagcag tgcccagggg acttctgggc ttacaggaca 1860
gcgtgtgtga caaaattcag atctacctga acttgcctct ggagatgata agggccaaag 1920
gagcagtcag ggagggggg tgagccagag tagtcccagg gggagacaga ttcctccctc 1980
ctccccgcct gcagctctct ttaatttttt gtaacatttg gagagacgtc cgtcctgtct 2040
tgtagtcttt ttattttgtg catccttata attgtattct acaaacaatt ttgttttctg 2100
catttaaaca tttttgtgtt tt
                                                                            2122
```